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..... FOR THE CONTROL OF WATER POLLUTION

.....

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THE UNIVERSITY OF ALBERTA
LEGISLATIVE TECHNIQUES USED IN
CANADA FOR THE CONTROL OF
WATER POLLUTION

by



PETER F. RHODES

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies and Research, for
acceptance, a thesis entitledLEGISLATIVE TECHNIQUES.....
.....USED IN CANADA FOR THE CONTROL OF WATER.....
.....POLLUTION.....
submitted byPETER F. RHODES.....
in partial fulfilment of the requirements for the degree of
Master ofLAWS.....

ABSTRACT

The last few years have seen a heightened public awareness of the nature and extent of the environmental problems that confront today's society. This public awareness has been accompanied by the enactment of legislation to deal with pollution and the environment. Although the environment is the totality of the earth's resources of air, land and water, the last constituent element only has been selected as the topic of this study. Water pollution and the legislative responses to it provide a good example of how laws can be enacted and utilised to deal with environmental problems.

The study of the legislation in this area indicates that there are many laws and systems for environmental control that can be utilised. An investigation is made into such laws to determine their relative effectiveness. It appears that in enacting such legislation governments across Canada have tended to adopt simple control legislation rather than developing techniques which suit their particular problem or region. The administration and enforcement of the present legislation has been found to be random and sporadic.

In concluding this study emphasis is placed on the need for the development of an environmental policy and sophisticated and innovative legislation to achieve its objectives, together with greater public involvement in the administrative and enforcement processes.

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Real life, in our time, has shown an alarming tendency to overtake science fiction, and this tendency is nowhere more evident than in the subject I am going to talk about today - the problem of the human environment. It is a problem which, although it is by no means new, has suddenly taken on the quality of a nightmare.

- U Thant, Former Secretary
General of the U.N.¹

INTRODUCTION AND PLAN OF THESIS

The area of water pollution control is only one small facet of a problem that has become known as the "environmental" or "ecological" crisis. This in turn is only a part of the total issue of the ecosystem and man's position within it. To attempt to review the whole area is far beyond the scope of a thesis such as this. A study of water pollution, though, is worthwhile in the sense that it mirrors the entire problem and provides a sound perspective for evaluating responses to it.

In man's struggle to conquer his environment for progress and economic gain his tendency has been to consider the earth's resources as unlimited. Nowhere has this been more aptly illustrated than with the precious resource of water. It has been exploited as a source of energy and food, a receptacle for waste and a means of transportation. Little thought was given to its depletion and befouling. Only when the evidence of the deterioration of the resource was made manifest, by it becoming a health hazard or deteriorating aesthetically, was the public conscience awakened. Often this was too late. Man has gradually begun to respond to this problem in many ways. One of the most important of these ways has been his attempts to prohibit or control any further pollution

by resort to the law and legal controls. It is this latter response to the problem which will be considered in this thesis.

It is proposed to examine critically statutory techniques that have been used in the various Canadian jurisdictions to deal with water pollution. This approach of examining the techniques used allows one to consider "the system" employed rather than merely enumerating a series of relevant statutes. Obviously in approaching the problem in this way one will have to consider actual legislation, but this will only be done under the umbrella of the technique used. Reference will be made in this thesis to almost all the jurisdictions in Canada but only the most significant and innovative techniques and legislation will be considered in any detail.

In approaching the problem this way there will be a consideration of the techniques employed by the federal government and the provincial governments. The discussion of this legislation will not be along federal-provincial lines. The legislation considered in this thesis, be it federal or provincial, will be collectivised according to its thrust. It is conceded that this may give a somewhat distorted and artificial picture of the area. Some reference will be made, though, to the constitutional sources whereby the two levels of government derive their power to legislate for the environment. It is hoped that this reference to the constitution will remind the reader that legislative initiative in this area is premised on constitutional competence.

It should be emphasized that the problems of the constitutional division of powers and public property will not form part of this thesis. This is an extremely complicated area that has been much discussed² and is really outside the scope of this thesis. It is submitted

that one can legitimately consider the techniques used for water pollution control in Canada without being involved in any complex constitutional debate. This has been done in this paper by acknowledging the constitutional divisions in the area, but restricting the discussion to an examination of the effectiveness of the law as it stands.

The central idea intended to be developed in this thesis is that the statutory techniques that exist today are, with some significant modification, adequate to deal with the problem of water pollution. This finding is based on the examination made in the next five chapters on the current techniques. It is felt that the administration and enforcement, or lack of it, has led to much of the breakdown in the present system. That being so, a chapter will deal with methods by which these problems could be overcome. The final chapter will deal with suggested approaches and techniques for the achievement of optimum legal control of water pollution.

As a necessary prerequisite to any discussion of statutory techniques, some consideration must be given to the traditional common law remedies that have long existed in this area. As the following brief discussion will illustrate, it is submitted that the common law remedies alone are inadequate to deal with the sophisticated problems of today's environment. This is why the emphasis today is on statutory techniques for the control of water pollution.

CHAPTER I

THE DEFICIENCIES OF THE COMMON LAW AS A MEANS OF WATER POLLUTION CONTROL

The Common Law as a Means of Water Pollution Control

The common law remedies were developed long before the issues raised in many cases came to be characterized as environmental. Nevertheless, many of the principles raised in nuisance,³ trespass,⁴ negligence,⁵ *Rylands v. Fletcher*⁶ and riparian rights actions⁷ were relied on in cases that we would regard today as immediately raising environmental issues. This importance accorded to the common law is emphasized by the fact that lawyers traditionally consider it first as a means of protecting their client's interests. It is submitted, however, that in this area the emphasis has moved from common law to statutory protection and regulation of such rights. The establishment of purely environmental legislation has shifted the focus of lawyers and concerned persons to administrative and statutory procedures for objection to and relief from alleged environmental ills. The reason for this shift is simply a recognition of the fact that the common law is no longer adequate to deal with the intricate and sophisticated problems of today. One writer has succinctly put the issue in these words:⁸

. . . the common law is useful for an individual or a group with a property interest, sufficient resources, and determination to assist the general environment through the vindication of private property rights. At the same time, this combination of prerequisites will occur so rarely that it is illusory to look toward the common law as a systematic tool with which to improve the environment.

The major defects of the common law may be enumerated as follows:

1. Problems of Standing

The problem of *locus standi* in all of the common law actions, except perhaps negligence, relates to the nature of the remedy itself. These heads of liability exist to provide a remedy for injury to, or

interference with private property rights. If an individual cannot show that he has had such rights abridged, he will have no standing at common law.⁹ This pre-occupation of the common law with private property rights is aptly illustrated by considering the ingredients of the private nuisance action. Firstly, only the occupier of the land affected can bring the action.¹⁰ Secondly, he must prove either "physical injury to the land"¹¹ or "interference with his use and enjoyment of the land."¹² Given the obvious fact that only a few landholders find themselves in the position of being adjacent to bodies of water, the number of persons entitled at common law to bring such actions are relatively small.

The concept of public nuisance has emerged to deal with wrongs against the public at large. If the pollution becomes sufficiently widespread and severe, then it may be possible for an individual to persuade the Attorney-General to treat it as a public nuisance.¹³

At first blush it would appear that the public nuisance action is a good method of getting around the *locus standi* problems inherent in the private tort actions. This has proven to be illusory for two main reasons. Firstly, public nuisance is a criminal action with the Attorney-General having the sole right to bring an indictment. Attorneys-General are not only public officials but also elected officials. Consequently, they are subject to pressures from a constituency which may be far larger than the community suffering the nuisance. For example, an Attorney-General may be somewhat reluctant to act against a polluting industry which is valuable to the province as a whole, merely to satisfy a group of fishermen that have been affected in a local region. It has been said:¹⁴

The theory that the Attorney-General will sue is often a meaningless fiction, since he is a political animal who will not act where other government departments fear to tread in enforcing legislation against polluters.

and:¹⁵

. . . ordinary persons enjoying the natural environment will obviously be wholly dependent on the almost unfettered discretion of the Attorney-General to decide whether to protect the public domain. The paucity of public nuisance cases would justify deep pessimism on this point.

The second major defect of the public nuisance concept is that it can block legal action by a private citizen who has been directly affected. When the conduct complained of affects a community of people, the common law denies any one person standing to sue, unless he can show special damages, distinct from or greater than that suffered by others.¹⁶ This principle has recently been confirmed in Canada by the case of *Hickey et al. v. Electric Reduction Co. of Canada*.¹⁷ This case was brought by a group of fishermen against the defendant company which had poisoned the waters of an adjacent bay, destroying the fish and impairing the plaintiffs livelihood. Furlong C.J. dismissed their claim on the basis that they had not shown any special damages, as the rights of all fishermen, and not just commercial fishermen, had been violated. In such a situation the only remedy of these aggrieved individuals was to persuade the Attorney-General to bring an action in public nuisance. The deficiencies of this alternative course of action have already been outlined.

The whole concept of special or particular damage in private actions based on a public nuisance is the subject of continuing academic debate and uncertainty.¹⁸ There is still some question as to whether the plaintiff must show his particular damage is different in "degree"¹⁹

only or in "degree and kind"²⁰ to that suffered by the general public. Canadian decisions tend to support the latter approach but the matter is far from settled.²¹ In the ordinary case of public nuisance there may well be no individual who has suffered the particular damage required by either of these tests. Furthermore the Canadian propensity for the "degree and kind" test makes it even less likely that a suitable individual plaintiff will be found to bring a private action based on a public nuisance. If this is a true reflection of current law in Canada with regard to public nuisance actions, the Attorney-General is ultimately the only individual with "real" standing to bring such actions.

It has already been pointed out that the general public nuisance action is entirely at the discretion of the Attorney-General. A member of the public is entitled to lay information before the Attorney-General.²² If he decides to proceed on the basis of the information, a "relator action" is brought in the name of the plaintiff and the Attorney-General. The more vexing question is what can an individual do if the Attorney-General refuses to act, particularly when a *prima facie* case of public nuisance has been made? The traditional view is that the Attorney-General's refusal to act cannot be the subject of judicial review. Lord Halsbury speaking in the case of *London County Council v. Attorney-General*,²³ made this point quite clear:

. . . but the initiation of the litigation, and the determination of the question whether it is a proper case for the Attorney-General to proceed in, is a matter entirely beyond the jurisdiction of this or any other Court. It is a question which the law of this country has made to reside exclusively in the Attorney-General.

Some amelioration of this rigid stance has appeared in the English Court of Appeals' recent decision in *Attorney-General on the Relation of*

*McWhirter v. Independent Broadcasting Authority.*²⁴ This case dealt with two important problems of standing. Firstly, if there is insufficient time to obtain the Attorney-General's consent, will the Court grant an injunction at the behest of a private individual? Secondly, if the Attorney-General refuses his consent to relator proceedings can an individual bring an action in his own name?

Mr. McWhirter, the private owner of a television set, wanted to stop the Independent Broadcasting Authority from showing an allegedly obscene film. On the day before the film was to be shown he laid his information before the Attorney-General who refused to act *ex officio*. The next day, Mr. McWhirter, alleging there was no time for relator proceedings, sought a writ in his own name. The majority of the Court of Appeal acceded to his request. Lord Denning speaking for the majority stated:²⁵

If he waited until he obtained leave, it would be too late for the Court to take action; because by that time the film would have been shown and the damage would have been done. I think there is sufficient in his answer for us to anticipate that he may get leave and to act in advance of it. The obtaining of leave is a matter of procedure. In these days we have to mould procedural requirements so as to see that the duty which the statute ordains is fulfilled.

Lord Justice Cairns in his dissenting opinion refused to depart from the traditional approach thus indicating the matter is far from settled:²⁶

In my view the fact that it has not been possible in the time available to persuade the Attorney-General to take action is no sufficient ground for saying that the private individual is to be allowed to enforce the matter of public interest.

When the case came back to the Court of Appeal, Lord Denning examined at great length the problem of *locus standi* and the discretion of the Attorney-General. He concluded by saying:²⁷

In the light of all this I am of the opinion that, in the last resort, if the Attorney-General refuses leave in a proper case, or improperly or unreasonably delays in giving leave, or his machinery works too slowly, then a member of the public, who has a sufficient interest, can himself apply to the Court itself. He can apply for a declaration, and in a proper case, for an injunction, joining the Attorney-General if need be, as defendant. . . . I would not restrict the circumstances in which an individual may be held to have sufficient interest . . . But this I would emphasise, is only in the last resort when there is no other remedy available to secure that the law is obeyed.

Despite the caution given by Lord Denning, the *McWhirter* decision could become a very useful weapon in the arsenal of the environmental litigant. Undoubtedly it is a case which is very much based on the particular fact that the time for action was of the essence. It is not impossible to foresee an environmental situation in which irreparable damage could result in the short span of a day. The case if followed in this jurisdiction can only improve the public nuisance action and the problem of standing by making the Attorney-General aware that his actions might be the subject of judicial review.

The procedural problems of standing in the private tort actions and the public nuisance action still remain as the greatest bar to their success as a means of effective environmental control. The private tort actions remain rooted in the protection of property rights. The public nuisance action is still tied to the proof of "particular" damage or the discretion of the Attorney-General, albeit not as unfettered as it might have been before the *McWhirter* case. There is still a real need for a much broader based scheme of statutory regulation coupled with the

general right of all citizens to bring an action in defence of the environment.

2. Limits of Available Relief

The traditional forms of relief afforded to common law claims are damages and/or an injunction.²⁸ Any claim to damages is confined by the traditional notion that they must be reasonably foreseeable.²⁹ The problem inherent in this concept is that it is difficult to foresee many of the consequences that are likely to arise from pollution. The state of the ecological sciences is such that it is very difficult to predict in some cases what effect certain polluting activities will have on the environment.³⁰ This in turn makes it extremely difficult for a Court to decide if such resulting damage was reasonably foreseeable. Indeed, the suggestion has been made that if we are to continue with the common law actions a risk-benefit assessment should be made of the polluting activity, rather than the traditional foreseeability approach.³¹

If it appears that damages would not afford an adequate remedy, then a court in its discretion may grant an injunction. The difficulty in this area has arisen from the various exercises of this discretion and the criteria to be considered in granting injunctive relief. Factors such as the adequacy of damages, the oppressiveness of the injunction to the polluter and the community, and the adverse economic impact of an injunction have all variously been considered.

The general principles³² for the granting of an injunction were laid down in the case of *Shelfer v. London Electric Lighting Co.*³³ as:

- (i) If the injury to the plaintiff's legal rights is small,

- (ii) And is one which is capable of being estimated in money,
 - (iii) And is one which can be adequately compensated by small money payment,
 - (iv) And the case is one in which it would be oppressive to the defendant to grant an injunction,
- then damages in substitution for an injunction may be given.

Although this case has been followed in Canada,³⁴ there has been some difference of opinion as to whether all the factors listed had to be considered conjunctively or disjunctively. In other words, do both adequacy of damages and oppressiveness have to be established or are they alternative grounds for refusing an injunction?

The resolution of this problem has produced significant differences in the grant of injunctions. Some courts have attempted to "balance the equities," particularly where the polluter serves a vital function in the community and where such an order would cause great hardship on the other people concerned with this activity. In such a case the courts have taken the view that "unless there be something special in the case" whereby damages are substantial and compensation in monetary terms is insufficient, the injunction will not follow."³⁵ Other courts have said that if the individual has suffered damage he is entitled to a remedy, they have then attempted to "balance the equities" by granting a limited injunction or suspending its operation.³⁶

The entire exercise of balancing the equities has demanded that the courts weigh the social utility (i.e., jobs, the economy, and general welfare) of the nuisance or polluting activity against the damage caused by it.³⁷ This places the courts in the difficult and unenviable position

of having to decide if economic or environmental interests are supreme.

Even if an injunction is granted it may be abridged by legislation. Courts in making their decisions are not subject to any political pressure; governments are. This dichotomy is perhaps best illustrated by the case of *McKie v. K.V.P. Co.*³⁸ This case involved a suit by three downstream riparian owners against the defendant company which discharged effluent from its paper mill into the river. An action based on interference with riparian rights and nuisance was brought. The company's defences that the river was already polluted and that the business was of economic importance to the community were rejected. An injunction was granted, but its operation was suspended for six months. Subsequently, the Ontario Government passed the K.V.P. Co. Ltd. Act³⁹ which removed the injunction and allowed the riparian owners to have their claims settled by arbitration.

The *McKie* case and its aftermath dramatically illustrates that whatever rights and remedies are given by the common law are still subject to the paramountcy of statute law. This point is well illustrated by the defence of statutory authority. One author has bluntly put the position thus:⁴⁰

Many large Canadian companies are incorporated by special Act and given immunity from nuisance actions. Such Acts fall under the head of "imperative legislation." The immunity they bestow is airtight.

It would logically follow that if statutes can abrogate the common law and are the supreme law of the land then they should be concentrated on as providing the most "airtight" form of pollution control.

3. Common Law Water Quality Standards

In the majority of cases the common law action is concerned with settling a dispute between two individuals. In adjudicating such a case a court is confined to the facts before it. Thus, any water quality standards set by the court may bear little relationship to the optimum standards necessary to protect the body of water concerned for the general good. The narrow focus of the common law action prevents it from being an effective means of setting general water quality standards.

This defect in the common law can be illustrated by a brief look at the nuisance action. The core of nuisance is that it is an interference with the use and enjoyment of property. However, not all cases of detrimental conduct will involve liability. Only when the harm to one person is greater than he ought to be required to bear under the circumstances will liability follow. It is clear that any decision or standards set will involve compromise on the basis of reasonable user.⁴¹ In reaching a decision courts have looked at the factors such as the utility of the defendant's conduct,⁴² the gravity of harm,⁴³ unreasonable user,⁴⁴ and abnormal sensitivity.⁴⁵ It is submitted that these factors alone or in combination cannot be the criteria for the achievement of optimum water quality standards. They are grounded in traditional common law standards of reasonableness, with no relationship to more sophisticated scientific problems of water quality.

The riparian rights action can also serve to highlight the problem of using the common law to set effective water quality standards. Lord

McNaghten in *John Young v. Bankier Distillery*⁴⁶ spoke of the riparian proprietor being entitled to water "without sensible diminution or increase and without sensible alteration in its character or quality." What is an alteration in water quality? The early common law cases said the change had to be one detectable by the unaided senses.⁴⁷ If these changes in water quality were not visible to the naked senses alone, the action would fail. With the sophisticated pollutants of today it is difficult to envisage optimum quality standards being set by the senses of sight, smell or taste. Many pollutants, such as mercury, are not detectable except by scientific analysis of the water. Scientific evidence may often be the only way to prove pollution. The danger of purely scientific evidence to establish water quality standards is that "it could result in an almost complete prohibition against emitting any substance but pure water into a water course."⁴⁸ We are left asking, should changes imperceptible to the bare senses but measurable by scientific analysis be regarded as an alteration in water quality for a riparian rights action? To insist on purely visible or purely scientifically perceptible changes would be to set unreal water quality standards. Again a compromise between these two extremes is needed. But the common law is probably not the best means for achieving such a compromise.

The effectiveness of the riparian rights action as a vehicle for setting water quality standards is further limited by its history. As a result of the broad interpretation of pollution in this area and the inapplicability of certain defences,⁴⁹ these rights rigidly enforced, can have far-reaching repercussions. These rights apply equally to all waters and make no allowance for different classes of water and different

competing water uses. They also fail to allow that some pollution may be necessary and even desirable.

It is submitted that given the above list of factors which might be considered in any private action involving water quality, the courts cannot set standards for water quality that are best for society in general. A more streamlined or scientific set of criteria must be developed for setting water quality standards. This can only be done by regulation or statutory scheme. The common law criteria are vague, haphazard and unscientific. It must be made clear that it is not suggested that the courts *per se* are inadequate to deal with complex environmental problems. Rather it is suggested that the tools the common law provides the courts with are inadequate for them to deal effectively with the problem today.

4. General Defects of the Common Law

In strict theory the common law offers a broad range of remedies from which the citizen can select the ones which best suit his case. Furthermore the citizen can act on his own, assuming he has the necessary standing, without waiting for government action. In practice the citizen common law suit is not an effective means for broad, large-scale pollution control which the current situation demands.

Aside from the defects discussed above, the common law remedies are all characterized by their emphasis on the protection of individual rights. This offers a very narrow avenue for dealing with the pollution problem which is recognized as being a universal phenomenon. The unavailability of common law class actions in, for example, nuisance⁵⁰ is based on the common law notion that each individual property owner or

occupier must prove his own damage. Private citizens are not in a position to launch a multiplicity of common law suits which might achieve the desired broad controls. The collection of the necessary evidence of damage is difficult, time consuming and expensive.⁵¹ The high cost of common law actions and the likelihood of costs being awarded against the unsuccessful litigant serve as an effective deterrent to many citizen suits.

Even if an aggrieved party may be able to successfully plead his case, his remedy might well be affected by the defences of statutory authority,⁵² prescription, *volenti non fit injuria* and *de minimis non curat lex*.

The common law's insistence that invasion of a right or damage has to be proved means that these remedies are limited as a means of preventive pollution control. Whilst the case is being tried, and this is often a lengthy process, the pollution can continue. It is conceded that a plaintiff may apply for a temporary injunction to restrain the polluting activity complained of before the case is tried. To this extent the common law allows a measure of preventive control. The granting of a temporary injunction is not without its risks. The court can insist that the plaintiff undertake to be responsible to the defendant for any damages he may sustain from ceasing the polluting activity pursuant to the temporary injunction, if the plaintiff subsequently loses the case. This again is a significant deterrent factor for the private citizen whose financial resources will in all likelihood dictate that he cannot afford such a risk.

Conclusion

All of the problems mentioned earlier, in one way or another, militate against the effectiveness of the common law as a means of real pollution control. The attachment of the common law to individual proprietary rights ensures that it will never be effective to deal with the broader pollution problem. Furthermore, the courts in dealing with these private actions have been reluctant to take a "societal view of environmental litigation."⁵³ They have not been prepared to be flexible or to significantly extend traditional common law actions to the new challenges presented by current environmental pollution. The economic realities of industrial society have influenced some judges to refuse injunctive relief. They have ignored the larger diseconomy that pollution may ultimately bring.

Given the inherent defects in the common law actions and the lack of real judicial activism,⁵⁴ one can only conclude that the common law alone is an inadequate means of pollution control. It can no longer be considered in isolation but must be seen as a necessary adjunct to statutory regulation of water pollution.

CHAPTER I

FOOTNOTES

1. Address given at the University of Texas, Austin on May 14, 1970. (June 1970) U.N. Monthly Chronicle, Vol. VII, No. 7 U.N. Office on Public Information.
2. See, Agassiz Centre for Water Studies, "Constitutional Aspects of Water Management" (1968-69) University of Manitoba Research Reports No. 2, 3;
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Laskin, "Jurisdictional Framework for Water Management" (1961) Resources for Tomorrow Conference, Canadian Council of Resource Ministers, 213;
McGrady, "Jurisdiction for Water Resource Development" (1969) Man. L.J. 73;
McKenzie, "Interprovincial Rivers in Canada: A Constitutional Challenge" (1959-63) 1 U.B.C.L. Rev. 499.
3. See, *River Park Enterprises Ltd. et al. v. Town of Fort St. John* (1967), 62 D.L.R. (2d) 519 (B.C.S.C.);
Burgess v. Woodstock (1955), 4 D.L.R. 615 (Ont. H.C.);
Brown v. Morden (1958), 24 W.W.R. 200 (Man. Q.B.);
Groat v. City of Edmonton (1928), S.C.R. 522;
Van Egmond v. Seaforth (1885), 6 O.R. 599 (Ont. Ch.D.);
Donovan v. Lochiel (1905), 5 O.W.R. 222 (Ont. Co. Ct.) affm'd. 5 O.W.R. 785 (Ont. H.C.).
4. See, *Southport Corporation v. Esso Petroleum Co. Ltd.*, [1956] A.C. 218 (H.L.).
5. See, *Supra.* n.4.
6. (1866), L.R. 1 Ex. 265, 279-280 affm'd. (1868) L.R. 3 H.L. 330.
See, *Heard v. Woodward* (1954), 12 W.W.R. 312 (B.C.S.C.).
Saccardo v. Hamilton, [1971] 2 O.R. 479 (Ont. H.C.).
7. See, *John Young & Co. v. Bankier Distiller Co.* (1893), A.C. 691 (H.L.);
Embry v. Owen (1851), 6 Ex. 353;
Chasemore v. Richards (1859), 7 H.L. Cas. 349;

John White & Sons v. White, [1906] A.C. 72 (H.L.);
Stollmeyer v. Trinidad Lake Petroleum Co., [1918] A.C. 485 (P.C.)
 (Trinidad and Tobago);
Lyon v. Fishmongers Co. (1876), 1 A.C. 662 (H.L.);
Jones v. Llanrwst Urban District Council, [1911] 1 Ch. 393;
Stockport Waterworks Co. v. Potter (1864), 3 H. & C. 300;
Crossley v. Lightowler (1867), 16 L.T. 438 (Ch.D.).

8. Elder, "Environmental Protection Through the Common Law" (1973) 12 Western Ont. L. Rev. 107, 112. The author does suggest that lawyers could further exploit the existing common law remedies.
9. See, *Clare v. City of Edmonton* (1914), 5 W.W.R. 1133 (Alta. S.C.);
Oak Bay v. Gardner (1914), 19 B.C.R. 391 (B.C.C.A.);
St. Lawrence Rendering v. Cornwall, [1951] O.R. 669 (Ont. H.C.);
Gauthier v. Naneff, [1971] 1 O.R. 97 (Ont. H.C.).
10. See, *Billingsgate Fish Ltd. v. B.C. Sugar Refining Co.* (1933), 46 B.C.R. 543 (B.C.S.C.).
11. See, *River Park Enterprises Ltd. et al. v. Town of Fort St. John* (1967), 62 D.L.R. (2d) 519 (B.C.S.C.).
12. See, *Southport Corporation v. Esso Petroleum Co. Ltd.*, [1956] A.C. 218 (H.L.).
13. See, *Hadden v. North Vancouver*, [1922] 1 W.W.R. 655 (B.C.C.A.);
A.G. for B.C. v. Haney Speedway Ltd. (1963), 39 D.L.R. 48 (B.C.S.C.);
A.G. for Canada v. Bristow (1943), 3 D.L.R. 50 (N.S.C.A.).
14. Estrin and Swaigen, *Environment on Trial* (1974), 245.
15. Elder, *Supra.* n. 8, 122.
16. See, *Rainy River Navigation Co. Ltd. v. Ontario and Minnesota Power Co.* (1914), 17 D.L.R. 850 (Ont. C.A.).
Rainy River Navigation Co. Ltd. v. Watrous Island Boom Co. (1914), 26 O.W.R. 546 (Ont. C.A.);
McRae v. British Norwegian Whaling Co. Ltd., [1927-31] Nfld. L.R. 274 (Nfld. S.C.).
17. (1972), 21 D.L.R. (3d) 368 (Nfld. S.C.).
 For a comment on this case see, Estey, "Public Nuisance and Standing to Sue" (1972) 10 Osg. H.L.J. 563, 570.
18. See Fridman, "The Definition of Particular Damage in Nuisance" (1951-53) 2 U.W. Aust. L. Rev. 490.
 Bouden, "Evolution of Lawyers in Environmental Problems" (1975) 49, Aust. L.J. 399, 401.
19. Fleming, *The Law of Torts* (1971), 341.
20. Prosser, "Private Action for Public Nuisance" (1966), 52 Va. L. Rev. 997, 1011.

21. See, Lucas, "Environmental Control Through Civil Actions" (1970) B.C. Annual Law Lectures, 20.
22. See, Criminal Code, R.S.C. 1972, C-34, s.176.
23. [1902] A.C. 165, 169.
24. [1973] 1 All E.R. 689 (C.A.).
25. *Ibid.*, 693.
26. *Ibid.*, 694.
27. *Ibid.*, 698, 699.
28. Strictly speaking, in a riparian rights action, damage does not have to be proved, merely an interference with a right. As a matter of practical reality, unless substantial damage is proved the courts will grant only nominal damages and refuse injunctive relief.
See, *Taylor v. Bennet* (1836), 7 C. & P. 329 (Ch.D.);
Emhirst v. Spencer (1849), 14 L.T. (O.S.) 433 (Ch.D.);
Lillywhite v. Trimmer (1867), 16 L.T. 318 (Ch.D.);
Lee Conservancy Board v. Leyton Urban District Council (1906), 70 J.P. 318.
29. See, *Overseas Tankship (U.K.) Ltd. v. Morts Dock and Engineering Co. Ltd.* [1961] A.C. 388 (P.C.) (Aus.). *The Wagon Mound* (No. 2), [1967] (P.C.) (Aus.)
In this case it was held that the same foreseeability test of causation applied in public nuisance as had been held to apply in negligence.
30. See, Clark, *Water Pollution as a World Problem* (1971).
31. See, "Environmental Law - Risk Benefit rather than Traditional Standards of Proof" (1975) 25 Catholic U.L. Rev. 178.
32. *Supra.* n. 8, 159.
33. [1895] 1 Ch. 287 (C.A.).
34. See, *C.P.R. v. Canadian North Rail Co.* (1912), 7 D.L.R. 120 (Alta. S.C.);
Canada Paper v. Brown (1922), 66 D.L.R. 287 (S.C.C.).
35. *Per*, Halsbury L.J. in *Shelfer v. City of London Electric Lighting Co.* (1865), 1 Ch. 287, 311;
Huston et. al. v. Lloyd Refineries Ltd., [1937] O.W.N. 53 (Ont. H.C.).
36. See, *Stephens v. Richmond Hill*, [1955] 4 D.L.R. 572 (Ont. H.C.).

37. See, *Kent v. Dominion Coal and Steel Corp.* (1965), 49 D.L.R. (2d) 241 (Nfld. C.A.).
Nickey v. Electric Reduction Co. *Supra.* n. 17.
38. [1949] 1. D.L.R. 39 (Ont. C.A.); [1949] 4 D.L.R. 497 (S.C.C.).
39. S.O. 1950, c. 33.
40. Morrison, "The Nuisance Action: A Useful Tool for the Environmental Lawyer" (1974) U.N.B. L.J. 21, 28.
41. See, *Bamford v. Turnley* (1862), 3 B.&S. 66, 83.
42. See, *Shelfer v. City of London Electric Lighting Co.* (1865), 1 Ch. 287.
43. See, *Don Brass Foundry v. Stead* (1948), 48 S.R. (N.S.W.).
44. See, *Kraemer v. A.G. Tasmania*, [1966] Tas. S.R. 113 (F.C.).
45. See, *Robinson v. Kilbert* (1889), 41 Ch. 88.
46. [1873] A.C. 691, 698 (H.L.).
47. See, *Salvin v. North Brancepeth Coal Co.* (1974), 9 Ch. App. 705.
48. *Supra.* n. 8, 140.
49. See, Wisdom, *The Law on the Pollution of Water* (1966).
50. See, *Preston v. Hilton* (1920), 55 D.L.R. 647 (Ont. H.C.);
Turtle v. Toronto (1924), 55 O.L.R. 252 (Ont. C.A.).
51. The Ontario Government has spent four years collecting evidence against Dow Chemicals for an action involving pollution of the Great Lakes region.
52. This is highly contentious defence. See, *Canadian Pacific Railway Co. v. Parke*, [1889] A.C. 535 (P.C.) (Can.);
Maunsell v. Lethbridge Northern Irrigation District, [1925] 3 W.W.R. 202 (Alta. S.C.) *affm'd.*, [1926] S.C.R. 603.
Manchester Corporation v. Farnworth, [1930] A.C. 171 (H.L.);
Suzuki v. The Ionian Leader, [1950] 3 D.L.R. 790 (Ex.);
City of Portage La Prairie v. B.C. Pea Growers, [1966] S.C.R. 150.
53. Juergensmayer, "Common Law Remedies and Protection of the Environment" (1971) 6 U.B.C. L. Rev. 215, 234.
54. It has been suggested by some writers that the lack of success of the common law actions is due to the failure of lawyers to fully utilize these remedies. See, Elder, "Environmental Protection Through the Common Law" (1973) 12 Western Ont. L. Rev. 107, 112.
McLaren, "The Common Law Nuisance Actions and the Environmental Battle--Well Tempered Swords or Broken Reeds" (1972) 10 Osg. Hall L.J. 505, 507.

CHAPTER II

CRIMINAL SANCTIONS AS A MEANS OF POLLUTION CONTROL

Pollution as a Crime¹

If one accepts the traditional role of the criminal law as being the protection of the person and property, it would appear that this branch of the law could be effectively utilized to deal with the pollution problem. At its simplest level one would merely have to define types of conduct that are environmentally injurious to the society and prohibit them under pain of fine or imprisonment. Furthermore, it appears that under the British North America Act,² both the Federal and Provincial Governments could be involved in such an exercise: the former under its general criminal law jurisdiction³ and the latter pursuant to its control over property and civil rights⁴ and the power to punish by fine or imprisonment any breach of a provincial law.⁵

In fact this simplistic approach was originally used to deal with general environmental degradation. The public nuisance action was the earliest method for dealing with pollution.⁶ At common law and now under the Criminal Code,⁷ a public nuisance is punishable as a crime. Public nuisance was vaguely defined as some sort of conduct which abridged the interests, convenience or comfort of the public at large. Environmentally harmful conduct could be captured under this definition and dealt with as a criminal act. Provincial legislation used the same concept to deal with acts that were a nuisance from a public health or safety perspective.

The traditional method of criminalizing pollution activity is characterized by over-simplification and generality. It is no longer feasible or realistic to say simply the dumping of certain substances in water is prohibited. An evaluation of the pollutant and the receiving

waters has to be made and a scheme for regulating such discharges in that particular place developed. The pollution control aspects of the Fisheries Act⁸ will be outlined to illustrate the reasons for the nature of the changes made to the approach of simply treating pollution as a crime. The original Fisheries Act⁹ was one of the first pieces of legislation passed by the Dominion government. The anti-pollution provisions of this legislation were carried through in substantially the same form into the Fisheries Act 1970. This Act made it an offence to dispose of any "ballast, coal ashes, stones or other prejudicial or deleterious substances in any river, harbour or . . . water where fishing is carried on."¹⁰ Similarly, no "lime, chemical substances or drugs . . ."¹¹ were to be put into such waters, or on ice over such waters. Finally, people engaged in land clearing or logging were prohibited from putting "any slash, stumps or other debris"¹² into such waters. The Act also enabled the Governor-in-Council by order "to deem any substance to be a deleterious one"¹³ for fisheries conservation purposes, and to make regulations "respecting the obstruction and pollution of any waters frequented by fish."¹⁴

The main defect of this legislation was that the law failed to keep pace with the increasing number and kinds of pollutants which would degrade the water quality and hence the fisheries. No regulations were passed pursuant to the powers given to the Governor-in-Council. Yet scientific evidence showed that new pollutants were contaminating fisheries' waters. A good example of this was the buildup of mercury in the Great Lakes region. Despite the obvious dangers inherent in mercury contaminated seafood, it took the government some four years to react to the danger.¹⁵

Aside from chemical pollution there are other pollutants harmful to waters inhabited by fish. Thermal pollution is caused by the discharge of large quantities of heated water from industrial plants and nuclear reactors. In the United States the Department of the Interior, Federal Water Quality Administration and Fish and Wildlife Service has conducted studies which proved thermal pollution was harmful to aquatic life.¹⁶ Such sources of pollution exist in Canada too. The Douglas Point nuclear reactor pumps 200,000 gallons of water per minute into Lake Huron, such water being 20°C warmer than the intake water. In the United States federal standards allowed thermal discharges provided the overall water temperature was not raised by more than 4°C. In Canada no comparable legislative standards were enacted pursuant to the Fisheries Act.¹⁷

The above examples illustrate the increasingly sophisticated and complex types of pollutants that are now being encountered. The advent of such pollutants demands that we have an equally sophisticated method of controlling them. Criminal legislation, standing alone, is extremely primitive, inflexible and general in its operation.¹⁸ It was relatively easy for the original Fisheries Act to make the dumping of coal ash in fisheries water a crime. This was clearly identifiable pollution, whose harmful effects on the aquatic environment could be readily demonstrated. On the other hand, the presence of mercury and thermal pollution can only be accurately detected by scientific analysis. Despite the fact that studies have demonstrated that mercury and thermal pollution are harmful to the aquatic environment, there is still some controversy as to the permissible limits of such pollution.¹⁹ To simply criminalize any deposit

of these substances would be an unconscionable and naive way of dealing with the problem. Instead, studies were made into the effects, location and incidence of such pollution with a view to regulating such discharges. The subsequent history of the Fisheries Act as outlined below indicates that the purely criminal law approach to pollution control is being abandoned in favour of regulation and control type legislation.

It was not until late 1970 that the federal government belatedly succumbed to a rising public awareness of the pollution issue, and decided to exercise some of the powers it had. Rather than rely on the dormant Fisheries Act *per se* they decided to amend it:²⁰

We have these formidable powers now. We have these powers without amending the Fisheries Act. We have them without the Bill today. However, they are not specific enough. They are difficult to administer fairly. They don't deal with "wastes" in quantitative terms. By quantitative terms I mean concentrations . . . We should use terms which look ahead, which are designed to prevent pollution before it occurs . . . We can achieve these objects by defining wastes in the right way.

This statement clearly indicates that the basic criminal law technique was recognized as inadequate. Its rigidity is evidenced by the fact that it could not be adjusted to deal with waste in quantitative and qualitative terms. Furthermore it presupposed that the pollution had already occurred; it failed to deal directly with pollution at its source. The major amendments²¹ to the Fisheries Act were directed at these problems.

It has been pointed out that under the Fisheries Act waste was defined in extremely narrow and rigid terms. The expression "deleterious substance" failed to recognize that some pollution is necessary and even beneficial. The term deleterious substance is now defined in part as:²²

Any substance that, if added to any water would degrade . . . the quality of the water so that it is rendered deleterious to fish or to the use by man of fish that frequent that water, or any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means. . . .

This is a much broader and more workable definition of a pollutant. It has specifically dealt with the problem of thermal pollution, but more importantly it has gone beyond the limited approach of considering only a pollutant's effect on aquatic life. This definition now covers directly such problems as mercury pollution. Under the old Act, *prima facie*, one could only be liable if the pollutant affected the fish themselves. Mercury did not necessarily affect the fish adversely, but it did the consumer of such fish. Consequently the dumping of mercury into fisheries' water would not fall within the scope of the old Act. The only way the federal government could intervene in this area was to ban the sale of contaminated fish. The new definition of waste clearly makes it an offence to render fish unfit for human consumption and in doing so indirectly acts to improve the water quality.

A recent decision of the Northwest Territories Magistrates Court²³ further illustrates the flexibility of this new definition of deleterious substance. The Giant Yellowknife Mines Ltd. was charged under section 33 of the Fisheries Act with depositing a deleterious substance in water frequented by fish. The evidence presented indicated the defendant company had discharged arsenic into fisheries' waters. The amount of arsenic discharged was proven to be toxic to the fish but not necessarily to the consumer of the fish, at least in the short run. Nevertheless a conviction was entered on the basis that the definition is rendered in the

alternative, it being an offence to render the water harmful to the fish *per se* or to the consumer of the fish. Both adverse effects do not have to be proven.

Pursuant to the original Fisheries Act the Governor-in-Council was only entitled to make regulations concerning obstruction and pollution of fisheries' water. This was seen as a somewhat limited power:²⁴

This federal jurisdiction would not authorize legislation to achieve standards of water quality and waste inputs not related to conservation of fish.

To avoid this stricture the Governor-in-Council is entitled to make regulations concerning the concentration and classes of deleterious substances. This power inherently recognizes that there may be different pollutants in different bodies of water, wreaking different changes in that particular environment. In essence it allows for varying standards to suit particular conditions,²⁵ and pollutants. This is extremely important as it compensates for much of the rigidity and inflexibility of the original Act and the criminal law approach.

The original Fisheries Act was characterized by the fact that action could only be brought after the pollution occurred. The 1970 amendments²⁶ to the Act allow the Department of the Environment to ask any firm about its plans for expansion or new construction; to be informed about the anti-pollution measures to be taken in each case; to approve or disapprove of these plans; and, with the backing of the Governor-in-Council, to require any modifications necessary to protect the fisheries waters of Canada.

The Fisheries Act has been dwelt on at some length in this chapter. It is submitted that this is justified to illustrate the changes that have occurred in the traditional pollution control model. The Act which was

originally penal in nature, was found unworkable in that form and has now been so amended that it in fact is a complex system of preventive control and regulation, backed by criminal sanctions. It would be misleading to suggest that the improvements made to the fisheries legislation now make it a complete²⁷ means of dealing with water pollution. To be fair, one can afford to be optimistic that these changes will improve the total control scheme, particularly in the light of the history of its use by federal and provincial governments.²⁸

To the extent that criminal sanctions are an integral part of all pollution control schemes the problems and effectiveness of the criminal law in this area must be considered as follows.

1. Definitional Problems

It is a basic tenet of our system of criminal justice that before an individual or corporation can be criminally liable he must have committed an offence as defined by the law. The advent of new pollutants has provided a real challenge to the legislative draftsman, prosecutor and judge. The Fisheries Act can be used to illustrate the problem. Section 33(2) of the Act makes it an offence to deposit a "deleterious substance" in fisheries water, and goes on to define such substance as one which degrades the quality of such water. Some pollutants, such as phosphates, when added to water enrich it, stimulating plant growth and thereby helping the fisheries. Ultimately after the passage of some considerable time such plant growth will cause excess oxygen consumption or eutrophication and render the water sterile for fisheries. Can phosphates be said to be deleterious substances?

At what point in time does one decide if a substance is deleterious? Could a discharger of phosphate into fisheries waters ever be convicted under section 33(2) of the Fisheries Act? The question as to whether such a substance is deleterious, is not one which should be put before a Court. Regulations based on the necessary scientific research should stipulate what amount of phosphate should be discharged and into what receiving waters. This problem again serves to demonstrate the limited utility of classical criminal legislation alone.

2. The Basis of Criminal Liability

Most penal anti-pollution legislation has been drafted in the passive form so as to impose strict liability. Numerous defendants have argued that *mens rea* must be proved²⁹ before they can be liable for "causing" a pollutant to enter waters. This defence has been universally rejected:³⁰

In s. 33(2) of the Fisheries Act there are no such words as "knowingly," "wilfully," "with intent" or "without lawful excuse," and I am satisfied that this is an act which in the public interest, is prohibited under a penalty. . . .

I am therefore of the opinion that s. 33(2) of the Fisheries Act is an offence of strict liability, of which *mens rea* is not an essential ingredient.

This is an important stance that the courts have taken as it implies that they have recognized that pollution is clearly an issue of public importance.³¹ Such an interpretation can only help improve the effectiveness of the legislation.

Notwithstanding the fact that most courts have been prepared to find that criminal anti-pollution statutes impose strict liability, they have refrained from taking the ultimate step of interpreting them as

imposing "absolute liability."³² That is they have not gone so far as to say that once the *actus reus* is proven, no defence of any kind is possible and any extenuating matters could go only to sentence.

This was argued unsuccessfully in *Regina v. M.V. Allunga*,³³ in which the defendant was charged under the Oil Pollution Prevention Regulations, passed pursuant to the Canada Shipping Act.³⁴ These regulations make it an offence to discharge oil into any waters. The defendant was able to show that the discharge was due to a latent defect in a fuel oil line. The court dismissed the charge although the offence was one of strict liability. They held that once the *actus reus* was proved it must still be shown that the act was done willingly before liability can follow.

The criminal law in protecting the subject is extremely reluctant to impose any absolute liability. This has been made clear by a recent House of Lords decision in which Lord Diplock laid out in detail the jurisprudence governing the interpretation of criminal statutes.³⁵

Where penal provisions are of general application to the conduct of ordinary citizens in the course of their everyday life, the presumption is that the standard of care required of them in informing themselves of facts which would make their conduct unlawful, is that of the familiar common law duty of care. But where the subject-matter of a statute is the regulation of a particular activity involving potential danger to public health, safety or morals, in which citizens have a choice whether they participate or not, the court may feel driven to infer an intention of Parliament to impose, by penal sanctions, a higher duty of care on those who choose to participate and to place on them an obligation to take whatever measures may be necessary to prevent the prohibited act, without regard to those considerations of cost or business practicability which play a part in the determination of what would be required of them in order to fulfill the ordinary common law duty of care. But such an inference is not lightly to be drawn, nor is there any room for it unless there is something that

the person on whom the obligation is imposed can do directly or indirectly, by supervision or inspection, by improvement of his business methods or by exhorting those whom he may be expected to influence or control, which will promote the observance of the obligation. . . .

The insistence that there can be no criminal liability without fault is basic to the Anglo-Canadian system of jurisprudence. There are certainly no statutes which expressly impose such liability. There is some judicial precedent³⁶ for interpreting statutes as imposing absolute liability, although these decisions have been criticised.³⁷ However, if one accepts that pollution prevention is a matter of the utmost public interest, and criminal sanctions are employed to deal with it, then some thought should be given to the imposition of absolute liability.

To take such a step will mean a radicalisation of traditional legal concepts. It is submitted that it is arguable that such steps are necessary in the public interest. It is certainly conceded that hardships may be inflicted on some polluters. How can you detect the existence of a latent defect in a fuel oil line? On the other hand the existence of absolute liability will force potential polluters to ensure they use the best possible equipment and follow the best available procedures in conducting their operations. The benefit to society generally can arguably offset any detriment to the individual polluter. The defences such as the act of a third party,³⁸ an act of God,³⁹ or lack of negligence,⁴⁰ which are generally regarded as providing a defence to a strict liability action, will not negate a finding of liability if absolute liability is imposed. Nevertheless, they can be considered in any discussions on sentence.

The Parliament of Canada has already indicated that it has been prepared to alter traditional legal concepts. Lord Morris in *Tesco Supermarkets Ltd. v. Naltras*⁴¹ speaking about principles of criminal liability stated:⁴²

In general criminal liability only results from personal fault. We do not punish people in criminal courts for the misdeeds of others. The principle of *respondeat superior* is applicable in our civil courts but not generally in our criminal courts.

Nevertheless, if we look, for example, at the Fisheries Act, section 33(8) of that Act makes it clear that an employer can be held criminally liable for the acts of an employee even if such employee is never identified or charged with the offence. There may yet be some debate as to whether a single act of pollution can result in the employer and employee being convicted,⁴³ but the point remains that a significant change in the existing criminal law regime has been made. Furthermore, the same section of the Fisheries Act allows the employer or principal to escape liability only if he can show the offence was committed without his knowledge or consent and that he exercised due diligence to prevent its commission. The imposition of criminal vicarious liability and the reversal of the onus of proof, although not entirely novel concepts, are indicative of the legislature's willingness to "toughen up" statutes making pollution a crime. It is suggested that this recognition of the need for change in our current criminal sanction system could be carried through to the extreme of absolute liability.

3. The Extent of Criminal Sanctions

The main aim of criminal legislation is to protect life and property by providing sanctions⁴⁴ to deter undesirable conduct. If pollution is to be treated as a crime then any sanctions must be uniform and have some deterrent value. For a period of time federal anti-pollution legislation was characterised by a lack of uniformity in available fines for the same offence. The Canada Water Act,⁴⁵ the Northern Inland Waters Act,⁴⁶ the Fisheries Act and the Navigable Waters Protection Act,⁴⁷ all make it an offence to deposit waste in the appropriate waters. Yet the maximum fine a polluter might receive depended on which of these Acts he was charged under. This lack of uniformity was cured by amending the appropriate Acts so that under all of them a maximum fine of \$5,000 per day may be imposed for a continuing offence. This standardisation of penalties, although only a "house-keeping" change is important from an enforcement perspective. The maximum possible fine a polluter might receive no longer depends on which federal departments chose to be aggressive or to assume jurisdiction and prosecute the case.

An examination of current anti-pollution legislation shows a startling diversity of fines. For example, federal legislation provides for fines ranging from \$10⁴⁸ to \$100,000⁴⁹ for acts of water pollution. No doubt this disparity in fines reflects a value judgment as to the penalty that should attach to the breach in question. Certainly spilling tons of oil from a tanker is very different from throwing a pail of trash from a pleasure boat; but if a criminal sanction is to be employed then it should have some deterrent value. A fine of \$10 appears to be an unlikely deterrent. The British Columbia Minister of the Environment

speaking at the introduction of a bill to increase fines under the Pollution Control Act⁵⁰ said fines must be increased "in relation to present day values and to take inflation into account."⁵¹ It is thus submitted that any penalty imposed by anti-pollution legislation must truly reflect economic realities if it is to be a deterrent.

Governments unfortunately have tended to act only after a need for new measures or a severe deterrent has been demonstrated. This is aptly illustrated by the background to the Canada Shipping Act which now provides for fines of up to \$100,000. In 1970, the Transport Department brought fifty-one successful (out of fifty-seven charges laid) prosecutions for oil pollution from ships. Fines from all these convictions totalled only \$71,350.⁵² In February 1970, the oil tanker Arrow sank off Nova Scotia and the awesome limitations of the existing legislation were brought home to the government and the Canadian public.⁵³ The government immediately provided, *inter alia*, a single fine which was larger than the amount collected from all such breaches in a year.⁵⁴

The increase in the maximum possible fine under the Canada Shipping Act has indicated to the judiciary the seriousness with which the government regarded oil spills. The latest statistics indicate an increase in the amount of the fines levied although the number of convictions remained fairly constant. In 1973 there were forty-two convictions under the Act and \$152,000 in fines imposed. In 1974 a total of \$202,000 in fines was imposed after forty-eight convictions.⁵⁵

This apparent paucity of prosecutions and the relatively high conviction rate to charges laid illustrates a further problem inherent in the criminal sanction. Only the most obvious and clearly identifiable cases of oil pollution tend to be pursued. The prosecution is faced with

the formidable burden of proving beyond a reasonable doubt that the accused is the source of the identified pollution. This is an extremely hard onus to satisfy:⁵⁶

Illegal discharge of oil at sea is difficult to detect in commission, especially at night, and when detected is often difficult to attribute with certainty beyond reasonable doubt to the suspect vessel. . . . Tracing techniques are being improved, but present tests (like blood tests in paternity cases) show which vessel could not have caused the damage rather than which vessel did.

In the end result prosecutions tend to be made when the discharge occurs in a harbour or in an area where few ships are present so that the identification and collection of evidence against the polluter is feasible.

4. Sentencing Practice

Sentencing in the field of environmental crimes has hardly been a model of consistency. The imposition of a fine is still a matter of judicial discretion despite the increased penalty provided for by legislation. This point is aptly illustrated by an examination of decisions made pursuant to the Canada Shipping Act. In *Regina v. M.V. Turandot*⁵⁷ a court imposed a suspended sentence for a spill which cost approximately \$2,000 to clean up. Yet, in *Regina v. M.V. Vancouver Forest*⁵⁸ the court held that the imposition of a suspended sentence was not consistent with the spirit and intent of the legislation:⁵⁹

My observation is that when Parliament authorized the imposition of a fine not exceeding \$100,000 it was dealing with responsible citizens and was obviously concerned to make sure, if possible, no spillage would occur due to negligence. . . .

A suspended sentence does not serve as a deterrent when no conditions are imposed. I impose a fine of \$5,000. I consider that is the least I can impose under the circumstances in the case.

In the more recent case of *Regina v. M.V. Holly*,⁶⁰ the court imposed a fine of \$10,000 for a spill which cost only \$840 to clean up. Judicial discretion in such an area as this is desirable, as factors such as the nature of maritime operations, the size of the spill, its ecological effects and the cost of a cleanup must be considered in imposing a fine. A policy directive on sentencing should be developed so that a balance can be struck between judicial discretion and uniformity of sentences.

In the absence of such a directive one simple expedient that could be used to maintain both judicial discretion and deterrence is the minimum fine. If a high minimum fine is set it will act as a deterrent. Any penalty imposed over that limit and up to the maximum set by the legislation will be a matter of discretion. Some anti-pollution legislation⁶¹ already incorporates such an approach and there appears to be no reason in principle why it should not be extended to other such legislation.

Another problem of sentencing is the need to discriminate between individual and corporate polluters, where elements of agency or master and servant are involved. If, for example, the captain of a ship is found guilty of discharging oil into protected waters, can the court in sentencing him impose a severe fine, well beyond his means, on the assumption that his employer will pay it? In *Reg. v. Niel*⁶² such a practice was held by the Court of Criminal Appeal to be "entirely a wrong approach to the matter." It was felt to be unconscionable to sentence an individual believing his employers would pay the fine and in the hope they would be deterred from encouraging their servant to engage in polluting activities. This situation dramatically illustrates the need for the imposition of vicarious criminal liability, for without

it the court is going to be restricted to sentencing the individual before it, without being able to get at the real offender.

In setting fines some legislation⁶³ has chosen to discriminate between the liability of individuals and corporations. Practical realities and reasons of equity often dictate such a discrimination. If a fine is to be a meaningful deterrent to a corporation it must be of sufficient magnitude so that it is not simply discounted as a cost of doing business. The introduction of continuing fines has to some extent alleviated the possibility of this undesirable result.

5. The Enforcement Process

Perhaps the greatest weakness of criminal sanctions lies in the enforcement process. Enforcement of such legislation lies in the hands of the agencies of all three levels of government--federal, provincial and municipal. Given the diversity of interests inherent in all these bodies no unified enforcement policy has emerged. Enforcement of such legislation tends to be sporadic and purely random. Only in the most extreme and obvious cases do prosecutions tend to be laid. Rivalries between departments in the same level of government have hampered the enforcement process. For instance, in early 1969, the Fisheries Minister had asked two companies engaged in oil exploration in the Strait of Georgia to cease operations as he felt they constituted a potential pollution hazard. The Minister of Energy, Mines and Resources came to the defence of the companies and argued their activity was important and did not constitute a pollution danger. After considerable discussions between the departments the companies ceased operations on January 31, 1971.

It had taken some two years for agreement to be reached; in the meantime the potentially dangerous operations continued.

The recent *Giant Yellowknife Mines Case*,⁶⁴ unfortunately, has revealed that prosecutions continue to be delayed because of inter-departmental conflicts. The Department of Indian Affairs and Northern Development has jurisdiction over the Northern Inland Waters Act which is the single most powerful piece of legislation for direct pollution control in the north of Canada. Under the Act a permit system for waste discharges into northern waters was instituted. The mine was not licensed and was depositing tailing wastes (including arsenic) into Great Slave Lake. The Indian and Northern Affairs Department refused to prosecute the mining company as it felt its activities were economically beneficial. A frustrated federal Department of the Environment finally prosecuted the company under the Fisheries Act, alleging the wastes discharged were toxic to the fish in the lake. This rather roundabout prosecution could have been avoided by some clear policy directive from the department charged with overall responsibility for the environment.

Conclusion

Criminal sanctions are all but useless as a means of pollution control when standing alone. The environmental problem today is essentially one of devising an effective means of resource allocation. Water, for example, is no longer regarded as an infinite free resource. There are numerous competing demands put on this resource. A sophisticated system has to be developed which can balance and reconcile these demands.

The criminal sanction (or the characterisation of pollution as a crime) is not the vehicle by which resources can be allocated. It is too concerned with protecting moral values and is not designed to deal with complex economic problems. The usefulness of the criminal sanction lies in the fact that it can be used to back up a sophisticated system of resource allocation and hence pollution control.⁶⁵

The essence of criminal legislation is that it is universal, that is, it is generally applicable to all people in all parts of the country. Yet the evidence today indicates that the problems of pollution are such that different standards are demanded by different areas of the country. The quality of water in Hamilton harbour is extremely different from that in a lake high in the Rockies. To dump a bucket of oil in Hamilton harbour would probably cause no detectable deterioration of its water quality. To do the same act in a Rocky Mountain lake would likely be disastrous. Nevertheless criminal legislation tends to treat these two acts the same and as such can only be used to achieve rudimentary standards. Once we see these two acts of pollution as being different in consequence because of the body of water involved, we are of necessity moving away from pure criminal law and towards regulation, albeit backed by criminal sanction.

If the criminal sanction is viewed in this perspective, it is submitted that it can play an important role. The effectiveness of the criminal sanction in this setting lies in it being selectively enforced against particular types of polluters. A policy of enforcement based on the needs of a region and financial and personnel availability will have to be developed. Consideration will have to be given to the types

of pollution in determining an enforcement policy.⁶⁶ The statutes define the offence but do not indicate how the discretion to prosecute should be exercised. This will have to be done on the basis of the factors listed above and the legislative control scheme which the criminal law is to complement.

Criminal sanctions correctly used can stop existing pollution and prevent further pollution. If the prosecutor carefully chooses his case and sets a precedent, other similar polluters will tend to voluntarily change their activities. If the precedent set is ignored, the initiation of an investigation or the laying of criminal charges may result in a guilty plea, particularly if the polluter is reminded of the established precedent.

The prosecutor should be independent and free of all undue political pressures. This problem has arisen particularly in circumstances where a successful prosecution could result in economic hardship. It may be utopian to expect freedom from interference, especially in the light of the evidence already presented of interdepartmental rivalries, differing policy goals and vested interests. If governmental prosecutors fail to act or assert the necessary independence, then the only remedy left may be adverse publicity and the citizen suit.⁶⁷

The judiciary also has an important role to play in the criminal action. Much of our criminal legislation has been updated so that there is provision for the imposition of relatively severe monetary sanctions. A severe penalty in a statute is no deterrent unless it is imposed. The judiciary are generally agreed that any penalty imposed must be an effective deterrent, but there is a great difference of opinion as what penalty amounts to

a deterrent. In the absence of a sentencing formula for environmental actions, a plea must be made for judicial consistency and recognition of the seriousness of the behavior sought to be controlled. Recent judicial pronouncements tend to leave one pessimistic as to whether any consistent judicial attitude will develop in environmental prosecutions. Roebuck J. in *Regina v. City of Barrie* in imposing the maximum fine in an environmental action stated:⁶⁸

It is probably one of the graver issues of our time and the deterrent aspects must be taken into consideration to deter in this particular case a municipality from in any way endeavouring to commit this type of behavior again, but to deter others who might think they could do the same thing and get away with it.

On the other hand, Smith, Chief Magistrate, in imposing a \$2,000 fine under a section which provided a continuing fine of \$5,000 per day suggested the defendant was concerned:⁶⁹

much more with its corporate image which, if it is seriously damaged, renders it difficult to operate in a climate of hostile public opinion. . . . This is the real deterrent.

There still remains some uncertainty as to whether damage to a corporation's image is a sufficient penalty. One writer has suggested that "the stigma of crime has become a penalty in itself"⁷⁰ while another suggests "to be effective, the stigma would have to be such that the corporation's clientele were much less ready to deal with it."⁷¹

One really wonders whether concern over hostile public opinion is any deterrent when the defendant is a large employer in a remote northern city, producing a valuable commodity for southern purchasers. How is the company image going to be hurt when those in the immediate vicinity rely on it for employment and those who consume its products are probably unaware of its polluting activity?

In conclusion it is submitted that the criminal sanction approach to water pollution is inadequate to achieve any broad controls. It represents an *ad hoc* attempt to deal with particular problems as they arise. The current proliferation of criminal sanctions can be useful if they are regarded as being a lever to back up a more sophisticated system of resource allocation.⁷² Recognition of this role for criminal sanctions is already provided by such legislation as the Federal Fisheries Act which combines preventive provisions, regulatory controls and criminal sanctions. These alternative methods of pollution control must now be considered.

CHAPTER II

FOOTNOTES

1. This is an expression used by one writer to denote this method of pollution control. See, Morley, "Pollution as a Crime: The Federal Response" (1975), 5 Man. L. J. 297.
2. 1867, 30 & 31 Vict., c. 3 (Imp.). Hereinafter referred to as the B.N.A. Act.
3. *Ibid.*, s. 91(27).
4. *Ibid.*, s. 92(13).
5. *Ibid.*, s. 92(15).
6. See, *William Alfred's Case* (1611), 77 E.R. 816 (K.B).
7. R.S.C. 1970, c. 34, s. 1976.
8. R.S.C. 1970, c. F-14; am. c. 17(1st Supp.); am. c. 14 (2nd Supp.) the federal government's power with regard to fisheries is not exclusive by virtue of the fact that most of the river and lake beds in Canada and the appurtenant fisheries are vested in the provincial Crown.
9. 1867-68, 31-33 Vict., c. 60 (Canada).
10. R.S.C. 1970, c. F-14, s. 33(1).
11. *Ibid.*, s. 33(2).
12. *Ibid.*, s. 33(3).
13. *Ibid.*, s. 33(4).
14. *Ibid.*, s. 34(h).
15. Lofroth, *Proceedings of Association of American Law Schools Conference* (1970) alleged that both the U.S.A. and Canada had been informed of the dangers of mercury pollution in the Great Lakes at a Stockholm Conference in 1966. See, Commer, "Current Problems in the Environment Crisis: Mercury Pollution and its Legal Implications" (1971) 4 Nat. Res. J. 139.
16. Report released September, 1970. See, Loolock, "Temperature-- Biological Aspects Related to Nuclear Power Plant Siting, Operation and other Considerations" (1972) 8 Forum, 381.

17. Thermal Pollution is vaguely covered by the definition of "waste" in the Fisheries Amendment Act. S.C. 1970, c. 17.
18. See, Tedeschi, "Environmental Law in New South Wales" (1973) 47 Aust. L. J. 711.
19. Baram, "Legal and Regulatory Framework for Thermal Discharges from Nuclear Power Plants" (1972) 2 Environmental Affairs 505;
"Legal Conservation--Thermal Pollution from a Nuclear Reactor Plant" (1969-70) 47 J. Urban Law, 895;
John, "Thermal Pollution: A Potential Threat to our Aquatic Environment" (1971) 1 Environmental Affairs, 287;
"Thermal Discharges: A Legal Problem" (1971) 38 Tenn. L. Rev., 369.
20. *Per*, Davis, Federal Minister of Fishery and Forestry (House of Commons Debates on Amending the Fisheries Act 1952, Bill C-204 Hansard, April 20th, 1970).
21. S.C. 1970, c. 17.
22. *Ibid.*, s. 11(a)(b).
23. *Reg. v. Giant Yellowknife Mines Ltd.* (Unreported February 24th, 1975). See, (1975) 4 C.E.L.N. 34.
24. Landis, "Legal Controls of Pollution in the Great Lakes Basin" (1970) 48 Can. Bar Rev. 66, 34.
25. See, Chlor - Alkali Mercury Regulations S.O.R. 72-92.
Fish Processing Operations Liquid Effluent Regulations S.O.R. (June 1975)
Petroleum Refinery Liquid Effluent Regulations S.O.R. 73-670.
Pulp and Paper Effluent Regulations S.O.R. 71-578.
26. R.S.C. 1970 c. F-14 s. 33.1.
27. Earlier in this paper it was mentioned that no attempt would be made to deal with the constitutional problems related to water pollution control in Canada. It is necessary, however, to mention how the constitutional division of legislative and proprietary powers can significantly restrict the thrust of any legislation. The Fisheries Act was passed pursuant to the federal government's power to legislate for the protection of seacoast and inland fisheries. Thus any criminal liability imposed under the Act must relate back to the protection of fisheries. This is dramatically illustrated by the case of *Regina v. Callaghan* (1972) 3 Nfld. & P.E.I. R. 167 (P.E.I.S.C.) in which the defendant dumped farm and household refuse consisting of cans, paper, twine, bottles and human refuse into a stream. He was convicted at trial, under s. 33(2) of the Fisheries Act. On appeal it was held that the Crown had failed to prove any of the substances dumped were "deleterious" as defined by the Act, as they were not harmful to the fish.

One can hardly imagine a more obvious case of water pollution and yet the defendant escaped liability. Presumably too if he had been charged under an Act such as the Navigable Water Protection Act (R.S.C. 1970, C.N. 19) he would also have not been guilty of pollution unless it could be shown the pollutants hindered navigation. Aside from definitional ambiguities the obvious problem raised by the *Callaghan* case is the narrow scope of such penal legislation. It exists ultimately to protect only one special interest from the harmful effects of water pollution-- in this case fisheries. Any polluting activity not affecting fisheries appears to be beyond its scope. Thus the constitutional heads of power dramatically limit the role many statutes can play as a mean of general water quality maintenance.

28. It should be noted that in the four Maritime Provinces, British Columbia and the Northwest Territories the federal government regulates and administers the fisheries. In the other provinces the administration of the Act is delegated to the provincial departments.
29. See, *Reg. v. Churchill Copper Corporation Ltd.*, [1971] 4 W.W.R. 481 (B.C. Prov. Ct.);
Reg. v. McTaggart, [1972] 6 C.C.C. 258 (B.C. County Court);
Reg. v. Jordan River Mines Ltd. [1974] 4 W.W.R. 336 (B.C. Prov. Ct.).
30. *Per*, Arkell D.C.J. in *Reg. v. Churchill Copper Corporation Ltd.*, [1971] 4 W.W.R. 481, 485 (B.C. Prov. Ct.).
31. For comparison, see a similar approach taken by the English House of Lords in *Alpha Cell Ltd. v. Woodward*, [1972] 2 W.L.R. 1320 (H.L.) which involved a prosecution under the rivers (Prevention of Pollution) Act 1951. Section 2(1) of this Act makes it an offence to "cause or knowingly permit to enter a stream any poisonous substance." For further examples of courts interpreting criminal pollution control legislation as imposing strict liability, see, *Reg. v. Liquid Cargo Lines Ltd.* (1974), 18 C.C.C. (2d), 428 (Ont. Co. Ct.). This case involved a charge under s. 32(1) of the Ontario Water Resources Act. *Reg. v. Chinook Chemicals Corp. Ltd.*, [1974] 3 O.R. (2d) 768 (Ont. S.C.). This case involved a charge under s. 6(b) R.R.O. 1970. Reg. 15; pursuant to the Ontario Environmental Protection Act 1971. *Reg. v. Corporation of City of Sault Ste. Marie* (Ont. D. Ct. March 8th, 1974 unreported). See, (1974) 3 C.E.L.N. 215. This case involved a charge under s. 32(1) of the Ontario Water Resources Act.
32. This notion of absolute liability has led to the creation of what is known as "status offences." See, Howard, *Strict Responsibility* (1963), 47.
33. [1974], 4 W.W.R. 435 (B.C. Prov. Ct.).
34. R.S.C. 1970, c. S-9, s. 752; R.S.C. 1970-71, c. 27.

35. *Sweet v. Parsley*, [1970] A.C. 132; [1969] 1 ALL E.R. 347, 362.
36. See, *Rex. v. Larssonneur* (1933) 97 J.P. 206; 24 Cr. App. R. 74 (Ct. of Crim. App.)
Reg. v. Prince (1875) L.R. 2 C.C.R. 154.
37. See, Burns, "Status Offences--Some Recent Development in New Zealand and South Australia" (1968), 42. Aust. L. J. 52.
Clark, "The Defence of Impossibility and Offences of Strict Liability." (1968) 11 Crim. L.Q. 154.
38. See, *Impress (Worcester) Ltd. v. Rees*, [1971] 2 All E.R. 357 (Q.B.)
39. See, *Reg. v. North Canadian Enterprises, Supra.* n. 30.
Reg. v. Springbank Sand and Gravel Ltd., [1975] 25 C.C.C. 535 (Ont. Co. Ct.).
40. See, *Reg. v. Chinook Chemicals Corp. Ltd.*, *supra.* n. 30.
41. [1971] 2 All E.R. 127.
42. *Supra.* n. 40, 139.
43. See, *Reg. v. Federal Steam Navigation Co. Ltd.* [1973] 3 All E.R. 849 (C.A.).
44. Usually in the form of fines or imprisonment.

Although jail sentences for polluting the environment are an extreme method of pollution control, some countries have found it necessary to resort to them directly. Japan, for instance, has legislation that would provide for jailing the directors of companies responsible for environmental pollution. It is suggested that Japan has had to resort to this expedient as a consequence of the pollution problem that has resulted from the industrial development in that country over the last twenty years. Canada, on the other hand, is not nearly so industrialized and so the Japanese experience could not be validly translated into the Canadian scene. See, Japan Statutes, The Act for the Punishment of Crimes Concerning Health Hazards, Act. No. 142, 1970 (in force July 1, 1971).

45. S.C. 1970, c. 5.
46. S.C. 1970, c. 28.
47. R.S.C. 1970, c. N-19.
48. Migratory Birds Convention Act, R.S.C. 1970, C. M-12, s. 12.
49. Arctic Water Pollution Prevention Act, R.S.C. 1970, c. 2 (1st Supp.) s.18;
Canada Shipping Act, R.S.C. 1970, c. 27 (2nd Supp.), s. 3 inserted as s. 752.

50. S.B.C. 1967, c. 34. Fines for contravention of the Act are being increased from \$1,000 to \$10,000 with the maximum term of imprisonment increased from three months to one year.
51. Victoria Daily Colonist, June 8th, 1976.
52. *Department of Transport Report February 22nd, 1971* (Queen's Printer, Ottawa).
53. McTaggart-Cowan, *Task Force Report on the Sinking of the Tanker Arrow* (1970, Queen's Printer, Ottawa);

Final Report of the Royal Commission on Polluting of Canadian Waters by Oil and the Formal Investigating into the grounding of the steam tanker ARROW (Information Canada, 1970/72).
54. For comparative purposes it might be noted that the United Kingdom, Prevention of Oil Pollution Act 1971 Eliz. 2 c.60, (in force March 1st, 1973) introduced a maximum fine upon summary conviction of £ 50,000. The previous limit had been £ 5,000.
55. See, (1975) 4 C.E.L.N. 42. By comparison in the United Kingdom a total of 496 convictions were entered under the Oil in Navigable Waters Act, 1955, 3 & 4 Eliz. 2 c. 25, and a total of £ 70,741 in fines assessed for the ten year period ending in mid 1970. This meant an average fine of £ 143 was collected during that period - *per* Mason, H.C. Deb. Vol. 805, col. 585.
56. Dickens, "Law Making and Enforcement" (1974) Mod. L. Rev. 297, 299.
57. Unreported (B.C. Prov. Ct. November 31st, 1971) *per* Lowry, "The Shipowner and Oil Pollution Liability" (1972), 18 McGill L.J. 577, 582.
58. [1972] 4 W.W.R. 259 (B.C. County Court).
59. *Per*, Swencisky Co. Ct. J., *supra.*, 261, 262.
60. Unreported (B.C. Prov. Ct. April 26th, 1972) *per* Lowry, *supra.* n. 57. In *Reg. v. M.V. Irish Stardust* unreported (B.C. Prov. Ct., September 18th, 1973) (Star Phoenix, September 19th, 1973). The court imposed a fine of \$10,000 on the ship's owner and \$500 on the ship's captain. The ship's owner was found guilty of illegally discharging 200 tons of oil and the captain was found guilty of failing to report the oil spill to the authorities.
61. See, Animal Contagious Diseases Act, R.S.C. 1970, c. A-13, s. 46. Migratory Birds Convention Act, R.S.C. 1970, c. M-12, s. 12.
62. See, Devlin, *Sentencing Offenders in Magistrates Courts* Case 1561/65.

63. See, for example, Alberta, Oil and Gas Conservation Act, R.S.A. 1970, c. 267, s. 14.
64. (1975) 4 C.E.L.N. 36.
65. See, Morris, "Environmental Problems and the Use of Criminal Sanctions" (1972) 7 Land and Water Law Rev. 421.
66. See, Manaster, "Early Thoughts on Prosecuting Polluters" (1972) 2 Ecology L.Q. 471.
67. The effectiveness of these approaches will be discussed later in this paper.
68. (1970-71) 13 Cr. L.Q., 371, 382 (Ont. Co. Ct.).
69. *Reg. v. Giant Yellowknife Mines Ltd.* (February 24th, 1975, N.W.T. Mags. Ct. unreported) (1975) 4 C.E.L.N., 69.
70. Sutherland, *White Collar Crime in America* (1961), 43 per Dickens, "Law Making and Enforcement" (1974) Mod. L. Rev. 297, 302.
71. *Ibid.*, 160.
72. See, Glenn, "The Crime of Pollution: The Role of Federal Water Pollution Criminal Sanctions" (1973) 11 Am. Crim. L. Rev. 835; Sand, "Pollution Sanctions--A New Alternative To Civil Liability" (1973) J. Bus. Law, 47.

CHAPTER III

THE PERMIT SYSTEM OF POLLUTION CONTROL

The Permit System

Essentially, the permit system makes it an offence to discharge sewage or other wastes into water without authorisation from the appropriate government department or agency. Persons seeking to make such discharges can only do so subject to a permit. The permit system is the most widely used technique in Canada for the control of water pollution. It is in use in one form or another by the federal government¹ and notably the provinces of British Columbia,² Alberta,³ Saskatchewan,⁴ Manitoba,⁵ Quebec,⁶ New Brunswick,⁷ Nova Scotia,⁸ Newfoundland,⁹ and Prince Edward Island.¹⁰

As the permit system is widely used in Canada, it can be best outlined by considering the provisions and operations of one jurisdiction. British Columbia probably provides the best example of the permit system, in action.

The key to the operation of the system is contained in section 5(1) of the Pollution Control Act which states:¹¹

. . . after the first day of January 1970, no person shall, directly or indirectly, discharge or cause or permit the discharge of sewage or other waste material on, in or under any land or into any water without a permit or approval from the director.

Those persons discharging effluents before January 1970 were given until March 31st, 1972 to file information concerning their discharges with the Director of Pollution Control.¹² The Director could then insist that they apply for a permit.¹³ Certain municipal and regional discharges were exempted from these permit requirements.¹⁴ Persons intending to build likely sources of pollution in addition to obtaining a permit must obtain works construction approval from the Minister.¹⁵ Failure to obtain

the necessary permit can result in a fine up to \$1,000¹⁶ (this is to be increased to \$10,000¹⁷) or a prison term not exceeding three months¹⁸ (this is to be increased to one year¹⁹). A continuing offence can result in a fine of up to \$500 per day.²⁰

Applications for permits are filed with the Director of Pollution Control. Such applications must state the source of the effluent, the types and characteristics of the effluent, the quantity of the effluent and any other information which the Director deems relevant.²¹ All applications must be posted on the proposed effluent site and published in the British Columbia Gazette and in local newspapers as required by the Director.²²

Within ten days of the receipt of an application for a permit copies of it must be sent to agencies of the Departments of Agriculture, Health, Recreation and Conservation, for review.²³ These agencies must file their opinions within thirty days for consideration by the Director.²⁴ The grant, denial or modification of a permit application is at the discretion of the Director.²⁵ Usually a two stage procedure is followed. A provisional permit is issued and when all the conditions laid down by the Director are met, usually upon completion of the discharge works, a final permit is issued.²⁶ Final permits can be suspended or cancelled for a variety of reasons or the terms of the permit can be varied.²⁷

The Act provides a mechanism for objections to permit applications to be filed. Section 13(2) states:

Where the application is for a permit to discharge sewer or waste materials on, in, or under any land or into any water, an objection . . . may be filed by any person who has an interest in the land or who is an applicant for or the holder of a permit or licence issued under this Act or the Water Act and who claims that the land or any interest under such permit or licence would be affected by the granting of a permit.

Such objection must be filed within thirty days of an application for a permit being made or its publication in the British Columbia Gazette.²⁸ The Director shall in his sole discretion decide whether or not the objection will be the subject of a hearing.²⁹ If he decides not to hold a hearing any objector is without further remedy. It has been said "no right to a hearing exists."³⁰

Persons other than those with the particular interests specified in section 13(2) of the Act may file an objection to a permit application with the Pollution Control Board, an agency established by the Act. The Board shall then decide if the public interest requires that the Director shall take the objection into consideration in making his decision.³¹ This determination of the Board is final.³²

After the grant of a permit by the Director an appeal can be taken to the Pollution Control Board and thence to the Lieutenant Governor in Council or to the Supreme Court of British Columbia, at the appellant's choice.³³ The decision of the Lieutenant Governor in Council or the Supreme Court of British Columbia is final.³⁴

Finally, it should be noted that once a permit is granted it is subject to continued monitoring. The Director, Board and subsidiary members of these agencies can enter premises to inspect discharge outlets.³⁵ Breach of the permit, or the Act and its regulations can result in a suspension or cancellation of the permit.³⁶

The above outlines briefly³⁷ the operation of one model of the permit system that is currently in use in Canada. Some detailed consideration is now needed of the British Columbia Pollution Control Act and the permit system in general.

1. The Permit System and Riparian Rights

One of the basic issues that arises out of the permit system or any statutory control mechanism is how it relates to the common law rights of the individual landowner. The permit system is a creation of statute law and has been superimposed on the common law. Does this mean that, for example, riparian rights are suspended or abridged? Does a permit give a licence to pollute in defiance of the riparian owner's right to have the quality of his water unimpaired?

The Supreme Court of Canada in the case of *Upper Ottawa Improvement Co. et al. v. Hydro-Electric Power Commission of Ontario*³⁸ was confronted with the problem of reconciling statutory rights and riparian rights. Mr. Justice Locke in deciding that riparian rights and statutory rights were not mutually exclusive stated:³⁹

We are asked to say in the present matter that these ancient rights of the riparian owner, so long embedded in the common law, have been taken away by inference, a conclusion which I find impossible to reach. Had the legislature intended that these rights should be restricted to any greater extent than has been done by the statute, it would, no doubt have said so in clear terms.

Implicit in this statement is the notion that the issue is really one of statutory interpretation. Only if the clearest language is used abrogating riparian rights will the court find in favour of statutory rights. This strict interpretation approach is reinforced by the notion that riparian rights are an incident of property holding and to that extent might be regarded as property. The courts traditionally have been reluctant to interpret a statute as affecting an expropriation of property, particularly if no provision is made for compensation, without the clearest possible language. It appears to be settled law that in the absence of clear words of abrogation riparian rights can continue to exist

despite the imposition of a statutory control scheme.

In fact in some Canadian jurisdictions riparian rights are expressly preserved by the statutory enactment introducing the water quality control or permit scheme. For instance the Alberta Clean Water Act,⁴⁰ which imposes a permit system, expressly provided that:⁴¹

No civil remedy for any act or omission is suspended or affected by reason that the act or omission is an offence under this section. . . .

The section referred to above is one which makes it an offence to deposit a deleterious substance in a water course in a quantity and under terms and conditions in excess of that allowed by a permit. Thus it appears clear that in jurisdictions where such clear legislative statements are made, riparian rights are expressly preserved,⁴² at least to the extent that they can be utilised against discharges in excess of a permit's stipulations.

It is submitted that there are sound policy reasons for the maintenance and preservation of riparian rights, where they are upheld by clear words or by the absence of specific words of abrogation. No statutory authority, for economic, personnel and related reasons, is in a position to police all bodies of water. In such a situation the maintenance of riparian rights will ensure that there are individuals with the necessary standing to bring an action against any polluters. The maintenance of riparian rights should not frustrate any statutory scheme or delay and hinder any development, if it is made clear by legislation that such rights exist only to the extent that they are not inconsistent with the scheme of water quality control. In those areas where permits are granted, discharges in excess of the permitted levels might occur.

In such a situation a riparian owner should be allowed to bring an action to protect his own property rights and to ensure the permitted levels are kept. This approach allows a dovetailing of the common and statute law and dramatically illustrates how they can complement each other.

2. The Need for Comprehensive Planning and Hearings

The effect of the permit system is to promote individual or "point by point"⁴³ regulation as the conditions of each permit must be specially tailored to the individual polluter. Each permit issued should also take into account the quality of the receiving waters, the nature of the pollutants to be discharged and the cost to each polluter of treatment facilities. Thus, for such a system to work properly there must be an extensive study of the particular area taking into consideration all these factors. This scheme could only be totally effective after a battery of environmental impact studies. Until recently⁴⁴ British Columbia, for example, had no formal mechanism by which to ensure comprehensive studies into a region could be made before any development was initiated or permits issued. The Director of Pollution Control could, if he felt it was necessary, order a public inquiry into any matter of environmental concern.⁴⁵ This was a purely discretionary procedure and far from the structured type of investigation that the introduction of the permit system demanded. In fact this procedure has been utilised only once, when hearings were held to determine what standards should be applied to the agricultural, forestry, mining and food processing industry.⁴⁶

The granting of individual permits must fit into the total framework of any region's capacity to absorb waste materials. This can only be determined after detailed investigations of the region have been made.

Ideally such a study should be made before any permits are issued, so that carefully selected industries and polluters will be permitted to locate in the appropriate region. In practice the permit system has been introduced long after the location of polluters. This fact coupled with the point by point regulation of the polluter has often meant that the permit has been structured to the needs of the polluter rather than the region as a whole. The fact that the permit system has been largely superimposed on existing sources of pollution should not dissuade a comprehensive environmental investigation from being made into the region. The terms of existing permits can be subsequently modified to accord with the findings of such an investigation.

Assuming that approval has been given to a study to map out the pollution capacity of an area, some consideration must be given to its implementation and cost. These problems can perhaps be best illustrated by considering two studies the Government of Saskatchewan has been involved in.

The Qu'Appelle River Basin Study Board was established in 1970 as a joint project between the federal government and the provinces of Saskatchewan and Manitoba. The purpose of this study was:⁴⁷

To develop a comprehensive framework plan for the development and management of water resources for the social betterment and economic growth in the Qu'Appelle Basin.

The study took an inventory of the basic resources in the basin and from this data recommendations were expanded into the final report of the board in 1972.⁴⁸ This study has several drawbacks, namely, its economic framework, and the lack of public involvement.

The study was based on a cost-benefit theory of economic analysis. Intangibles such as aesthetics and well-being, although verbalized, were not a serious concern, except as an offshoot of the prime objective which was to utilize most effectively the basin region. Whether this disregard of aesthetics was because of the difficulty of quantifying such an intangible or because such a factor was simply considered unimportant to the overall scheme can only be a matter of speculation. The study group in its terms of reference should have clearly been charged to consider aesthetic factors.

Public participation in the collection of data and the making of board recommendations was apparently lacking. Again, one can only speculate as to the reasons for this, although one cannot disregard the attitude of the board in its report:⁴⁹

The development of methodologies for determining public involvement in resource planning is still in its infancy, and the implementation of public participation is costly and makes stringent demands on the time of the public and planners. . . .

The Churchill River study agreement was signed by the federal government and the provinces of Saskatchewan and Manitoba in 1973 to determine the social and environmental effects of possible development of power facilities on the Churchill basin. In Saskatchewan the study has been designated as a "referred project"⁵⁰ pursuant to the Saskatchewan Water Resources Management Act. This means that the process is not one required by law. If the government chooses to disregard the findings of the study there is nothing the affected citizen can do. This study is unique. Firstly, no significant pollution exists in the area, therefore, the board is called upon to define the capacity of the area to withstand pollution. Secondly, the government claims that there are no economic or

political interests involved in the results of the study, and consequently, determinations as to what use the basin will be put to will only be decided after the results of the study have been reached.

The study has taken some two years at a cost of \$2.5 million. The final report of the study group was tabled in June 1976 and some six months will be allowed for its consideration by the public before final hearings are held and a decision made as to the development of the region.

Some criticism⁵¹ has already been made as to the real extent of public participation in the study. Some \$300,000 from the budget was allocated for public involvement and an "expert" in the field of public participation hired. It has been suggested that this was not a successful exercise and the program was merely a vehicle for information dissemination. It was felt that the public was being co-opted rather than genuinely involved in the decision making process.

The two Saskatchewan studies illustrate that large scale impact investigations are accepted as a prerequisite to the development of any region and the introduction of any control scheme. Despite such problems as public participation, which merely indicate that large scale impact studies are still in their infancy, the overall worth of the studies has not been seriously questioned. The regions investigated in the studies were unique in that they were largely undeveloped. It is submitted, however, that governments should resist the present temptation to investigate such regions exclusively. Areas of existing pollution should also be investigated in a similar manner to determine optimum levels of water quality for the area, bearing in mind the present sources of pollution. The tendency has been to deal with existing areas of pollution by introducing a control system, such as the permit scheme, and doing little to relate the

permits to each other and the region as a whole. Environmental investigation should not only be seen as a prospective but also a retroactive process.

3. Permit Application Hearings and Judicial Review

A permit system to operate properly and to be fair must have some provision for hearing objections. Most permit systems in Canada have some provision for hearings, at least in theory. The grant of hearings is usually at the discretion of the administrative agency. There is some compelling argument that not every permit application should be the automatic subject of a hearing. The sheer enormity of such a task is amply illustrated by the following statistics. In British Columbia all effluent dischargers were required by the Pollution Control Act to register and be considered for a permit. Departmental officials estimated that between 8,000 and 10,000 dischargers would be involved.⁵² It is not hard to imagine the administrative chaos that would have resulted if each of these dischargers were made the subject of a hearing. On the other hand hearings should be held when an application raises genuine concerns for the environment.

The *Utah Mining Company* case in British Columbia shows how the entire hearing process can be subverted by the improper exercise of the discretion vested in an administrative agency.⁵³ In October 1969 the company submitted an application for a permit to discharge 9.3 million gallons per day of copper tailings into an inlet. Within the required statutory period some 150 written objections were filed by interested parties. The overwhelming public objection caused the permit application to be suspended indefinitely whilst further studies into the project were made. Finally after considerable pressure a hearing was held. In the

meantime the company had continued with its plans and engaged in site development. Thus at the time of the hearing the Board was faced with "a virtual fait accompli"⁵⁴ as \$30 million dollars had already been spent on the project. After a controversial hearing a permit was granted the company to discharge 9.3 million gallons of waste per day. The only modification was that the company had to post a bond of \$1.5 million which would be forfeited if the terms of the permit were not met. The evidence about the hearing indicates the Board was reluctant to hold it and when pressured into doing so sought to exclude as many objectors as possible. The fact that the permit was granted on the day immediately following the close of the hearings strongly suggests that the Board had not considered all the evidence tendered and in fact had prejudged the whole case.

An attempt was made in the case of *Piatocka v. Director of Pollution Control et al.*⁵⁵ to have the court review the grant of the permit to the Utah Mining Company. The plaintiff was a commercial fisherman who felt that to permit such a discharge would destroy his livelihood. His original objection to the permit was supported by some seventy-one other persons. The 1968 and 1970 amendments to the original Act narrowed the qualifications necessary for a person to file an objection because of a "private interest." The 1970 amendments to the Pollution Control Act also provided, *inter alia*, that a decision of the Director to grant a permit may not be removed into court by *certiorari* "save for excess or want of jurisdiction."⁵⁶ The plaintiff sought a writ of *certiorari* to quash the decision of the Director of Pollution Control to grant a permit. The court reviewed the pollution control legislation and concluded that the Director had to proceed in a judicial manner only in respect to "effective objections." On the facts it was found that the plaintiff had not complied with all the statutory

requirements for registering his objection, therefore, it could not be considered "effective." This being so, the court concluded:⁵⁷

In my opinion the Director is under no duty to consider an "ineffective objection," or if he elects to do so, he may proceed judicially in so doing.

As a result, the plaintiff and his co-signatories, who had a genuine interest in the permit under consideration, were denied a *certiorari* as they had filed an objection with the Director of Pollution Control instead of the Pollution Control Board. It seems somewhat harsh to deny the rights of those likely to be genuinely affected simply because of an administrative error. This decision also suggests that even if the plaintiff had filed his objection with the right body the court would have been reluctant to review the case on the merits alone.

On the other hand, the courts have been prepared to intervene (but not on the merits) in permit application proceedings notwithstanding a privative or no *certiorari* clause. Under the Pollution Control Act the Director has the sole discretion to decide whether an objection to the issuance of a permit should be made the subject of a hearing. In *Regina v. Venables, Ex parte Jones*⁵⁸ the court did hold that this discretion must be exercised judicially, at least to the extent of allowing any objectors to know the essentials of the case to be met and allowing them reasonable time in which to support and document their objections. Furthermore, in *Re Hogan and Director of Pollution Control*,⁵⁹ the same court insisted that an objector attempting to persuade the Director to hold a hearing must be furnished with the material filed by the applicant in support of his permit to discharge.

Another good illustration of the administrative problems involved in a point by point permit scheme appears in the Northern Inland Waters Act.⁶⁰

The Act provides for comprehensive management of northern fresh water resources and ensures that inland waters north of 60° will remain public property⁶¹ to be properly used, managed and developed. Although primary responsibility for the administration of the Act is vested in the Minister of Indian Affairs and Northern Development,⁶² two administrative boards, The Northwest Territories Water Board and Yukon Territories Water Board, with extensive delegated powers will be responsible for granting and removing water licences or permits.⁶³

The means of administering the legislation can be criticised on the grounds that the important right to water use has been delegated to a board with no political responsibility. This criticism does not appear as cogent as at first sight when one considers that water board members are nominated by the appropriate Territorial Council and the federal government,⁶⁴ who are responsible to an electorate. Presumably, the appointing groups will be mindful of this responsibility when exercising their power of appointment.

As the Act originally stood, the right of appeal from decisions of the board was restricted, and access to the courts restricted by an extensive no *certiorari* clause. It could have been possible to justify the limited right of appeal on the basis that members of the board are predominantly local residents and therefore in the best position to judge if a right to a particular water use is justified, rather than an unfamiliar distant appeal court. The new Federal Court Act⁶⁵ has removed the no *certiorari* clause, but appeal to that court can only be on a question of law, or jurisdiction, or with the leave of that court. Presumably, such leave will only be granted on the facts if the finding of the board is against the weight of all evidence. To further ensure the fairness of all

board licence applications, all such hearings must be public and any objections must be considered.⁶⁶

It is clear that the crux of the entire permit system is that it operates on the basis of decisions made by administrative boards and officials. Access to the courts from the decisions of such boards is limited. This may be justifiable on the simple ground of expediency. If every decision of such a board were subject to an automatic right of judicial review, then the entire system would be thrown into greater disarray. On the other hand, there is a demonstrated need for public participation in such administrative hearings. Most permit legislation allows objections to be filed, but few hearings actually take place.⁶⁷ Thus, important environmental decisions establishing standards tend to be made *in camera*. Objections to such a procedure can only be made by *certiorari*. The examination made of the case law in this regard shows an incredible vacillation and lack of uniformity by the reviewing courts. One can only conclude that further provision must be made for ensuring real public participation in such a decision-making process. This will be the subject of discussion later in this thesis.

4. Enforcement of the Permit Terms

Enforcement of the terms of each permit issued is crucial. Situations where the Acts have been invoked against polluters are lacking. The operative word in such a system is "may." There is a general and unfettered discretion given to the minister in the area of pollution control. This dearth of administrative action can be explained in a number of ways: only substantial cases of pollution are dealt with; there

is no pollution at all; or where the pollution has occurred it has been rectified by agreement without reference to any administrative or judicial body. Not all of these inferences accord with reality.

The realities of such a scheme are attributable to the very nature of point by point regulation. Such a scheme demands a large administrative staff and significant financial resources. In fact the permit holders usually monitor themselves and submit results to the department on request. This delegation is clearly open to abuse. Ideally, voluntary observance of standards set in a permit is more desirable than prosecutions. Unfortunately very often, permits tend to be regarded as a right to pollute rather than a mere licence to do so.⁶⁸ A policy of strict control over permit holders and prosecution of those who breach the terms of a permit is necessary to give credibility and effectiveness to the system.

Conclusion

The permit system of water pollution control can be an effective method of maintaining and preserving water quality, whilst at the same time having regard for the interests of all water users. To be fully effective the permit system must be integrated into an overall scheme for environmental protection. None of the legislation currently in force sets out the criteria on which a permit is to be issued.⁶⁹ It is simply at the discretion of the administrative agency, which decides on the basis of the information it deems necessary. In order to select the best possible criteria for the issuance of permits, a comprehensive scheme of environmental planning will have to be instituted. Only with this sort of information will optimum levels of permitted pollution be

obtained. Such an approach will demand a tremendous commitment of time, finances, resources and personnel by both the government and the public.

The role of the public in any hearings or objections to permits must be clearly defined. It is conceded that every application should not be the subject of a hearing but a balance must be struck between administrative convenience and the public interest. To ensure such a balance provision must be made for a meaningful judicial review of the administrative agency by *certiorari* or *mandamus*.

The day to day monitoring of licensed and unlicensed polluters will demand further financial and personnel commitments. This is the real weakness of the point by point system of control. It is submitted that this problem can be alleviated by the grant of standing to all citizens to proceed against those who pollute beyond the terms of their permits.

Provincial boundaries can also impose severe limitations on the use of the permit or any other system by each province. For example, British Columbia is fortunate in that many of the rivers and water ways in that Province originate in the province and flow out of it. Therefore, since they have complete authority over the rivers from the source until they exit the province, they can issue permits which can effectively regulate the quality of such waters. Downstream provinces are not so fortunate. There seems to be little advantage in their setting rigorous standards for the granting of permits if the upstream provinces set less rigorous standards for the same body of water. This situation highlights the necessity of harmonising any system of water pollution control and for dealing with a river system as a whole.

Since the Supreme Court of Canada in *Inter-Provincial Co-operatives Ltd. et al. v. The Queen in Right of Manitoba*⁷⁰ has emphasised the difficulty

of maintaining an action for damages against a polluter licensed in another province, the need for interprovincial co-operation in the setting of water quality standards and permitted levels of pollution has been further demonstrated. Given the realities of the present political situation, this is unlikely to occur.⁷¹ This being so, each of the provinces might well find itself forced into the situation of perfecting the best method of dealing with water pollution in its area of jurisdiction, rather than dealing with a river as a single entity.

At the start of this chapter it was pointed out that the permit system in one form or another is used by all of the Canadian jurisdictions. This Canada wide adoption of the permit system might be taken as evidence of the fact that it is the best available system of water pollution control. There are those who suggest that this wholesale adoption of the permit system merely reflects the tendency of governments to emulate what is believed to be successful elsewhere. It has also been said that governments when confronted with a problem and forced to deal with, react instinctively by passing legislation without considering all of its ramifications.⁷²

And yet the first recourse of governments when electorates demand that they "do something" about a problem is nearly always to pass laws and issue regulations about it.

Whatever the reason might be for the adoption of the permit system, the fact is that it is the core of all water pollution control systems in Canada. The problems inherent in the permit system have been outlined. Nevertheless, it can be an effective system but it is submitted that it may not be, in its present form, the universal panacea for the pollution ills that most Canadian jurisdictions seem to envisage. If the system is to remain as the key to water pollution control in this country, consideration must be given to other techniques and approaches whereby it can be refined, modified, and supplemented to properly achieve the true objects of the system.

CHAPTER III

FOOTNOTES

1. See, Northern Inland Waters Act R.S.C. 1970, c. 28 (1st Supp.)
am. R.S.C. 1970 c. 10 (2nd Supp.) s. 6(1);
Ocean Dumping Control Act, S.I. 175-122 Gaz. 12/11/75 3054;
Ocean Dumping Control Regulations S.O.R. 175-595.
2. See, British Columbia, Pollution Control Act S.B.C. 1967, c. 34;
am. 1968, c. 38 jam. 1970, c. 36; am. 1972, c. 45, s. 5.
Pollution Control Regulations 1967. S.O.R. 1185; am. 1307/67;
am. 464/68; am. 748/69; am. 4069/71; am. 4374/71.
3. See, Alberta, Clean Water Act S.A. 1971, c. 17; am. 1972
c. 20 s. 4; am. 1972 s. 3, s.9.1.
4. See, Saskatchewan, The Department of the Environment Act, s.s. 1972,
c. 146, s. 17.
5. See, Manitoba, Clean Environment Act S.M. 1972, c. 130 s. 14.
6. See, Quebec, Environment Quality Act, Que. S. 1972, c. 49 ss. 20, 20.
7. See, New Brunswick, Water Act S.N.B. 1960-61, c. 19; am. s.10.
8. See, Nova Scotia, Environmental Protection Act. S.N.S. 1973, c. 6;
am. S.N.S. 1975, c. 66, s. 24.
Water Act R.S.N.S. 1967, c. 335; am. S.N.S. 1968 c. 64;
(am. April 24th, 1970) s. 8.
9. See, Newfoundland, Department of Health Act, R.S. Nfld. c. 83 s.20
Water Protection Act S. Nfld. 1964.
10. See, Prince Edward Island, Environmental Protection Act S.P.E.I.
1975, c. 9, s.9.
11. *Supra.* n. 2.
12. *Supra.* n. 2, s. 5(1a).
13. *Supra.* n. 2, s. 5(1a)b.
14. Pollution Control Regulations, S.O.R. 1185/67; 1302/67; Reg. 2.08, 2.09.
15. *Supra.* n. 2, s. 21.
16. *Supra.* n. 2, s. 20(A).
17. A bill was introduced into the British Columbia Legislature on
June 8th, 1976 to introduce this new limit. *Victoria Daily
Colonist*, June 8th, 1976.

18. *Supra.* n. 2, s. 20(A).
19. *Supra.* n. 17.
20. *Supra.* n. 2, s. 20(A).
21. *Supra.* n. 14, Reg. 2.01, 2.07.
22. *Supra.* n. 14, Reg. 2.02, 2.04.
23. *Supra.* n. 14, Reg. 4.01.
24. *Supra.* n. 2, s. 5(5).
25. *Supra.* n. 2, s. 5(3).
26. *Supra.* n. 2, ss. 5(3), 7. For a more detailed outline of this procedure see Campbell, Pearse and Scott, "Water Allocation in British Columbia: An Economic Assessment of Public Policy" (1972) 7 U.B.C. L. Rev. 247, 273.
27. *Supra.* n. 2, s. 7(A).
28. *Supra.* n. 14, Reg. 2.01(L).
29. *Supra.* n. 2, s. 13(4).
30. *Per*, Morley, "The Legal Framework for Public Participation in Canadian Water Management" in *Environmental Management and Public Participation* (1976) 40, 60.
31. *Supra.* n. 2, s. 13(6).
32. *Supra.* n. 2, s. 13(6).
33. *Supra.* n. 2, s. 12(1)(a)(b)(c).
34. *Supra.* n. 2, s. 12(7).
35. *Supra.* n. 2, ss. 11, 15.
36. *Supra.* n. 2, s. 7A.
37. For a more detailed discussion of the British Columbia legislation see, Lucas, "Water Pollution Control Law in British Columbia" (1969) 4 U.B.C. L. Rev. 56;
 Lucas, "Legal Techniques for Pollution Control: The Role of the Public" (1971) 6 U.B.C. L. Rev. 167;
 Good, "Anti-Pollution Legislation and its Enforcement: An Empirical Study" (1971) 6 U.B.C. L. Rev. 271.
38. [1961] 28 D.L.R. (2d) 276 (S.C.C.).

39. *Ibid.*, 289.
40. S.A. 1971 c. 17; am. 1972.
41. *Ibid.*, s. 9(6).
42. See Thompson and Wild, "Maintenance of Water Quality - Alberta's Legislative Scheme and the Common Law" (1972) 10 Alta. L. Rev. 354, 367.
43. An expression used to describe such individual regulation. See, Dales, *Pollution, Property and Prices* (1968) (84).
44. The Lower Mainland Regional Planning Board was created in 1949 to deal with the environmental problems of 28 lower mainland municipalities. Due to financing and related problems it was dissolved in 1969.
45. *Supra.* n. 2, s. 14.
46. Hearings were held in 1972 and a report tabled in 1975 setting out control objectives.
47. Saskatchewan Water Resources Commission Annual Report (Queen's Printer, Regina, 1972).
48. Report of the Qu'Appelle River Basin Study Board (Queen's Printer, Regina, 1972).
49. *Ibid.* 4.
50. Sask. Regs. 28/73.
51. See, Saskatoon Star Phoenix, December 3rd, 1974, 4.
52. Franson and Lucas, "Environmental Decision Making in British Columbia" in *Environmental Management and Public Participation* (1976), 88.
53. For a detailed discussion of this case and its history see, Lucas and Moore, "The Utah Controversy: A Case Study of Public Participation in Pollution Control" (1973) 13 Nat. Res. J. 36.
54. *Supra.* n. 52, 96.
55. [1971] 5 W.W.R. 626 (B.C.S.C.).
56. Pollution Control Amendment Act S.B.C. 1970, c. 36 s. 14.
57. *Per*, Atkins J. [1971] 5 W.W.R. 626, 633 (B.C.S.C.).
58. [1971] 15 D.L.R. 355 (B.C.S.C.). See too, *Re Hooker Chemicals Application*, [1970] 75 W.W.R., 354 (B.C.S.C.).

59. [1972] 24 D.L.R. (2d) 363 (B.C.S.C.).
60. S.C. 1970, c. 28; am. s. 21 S.C. 1970 (2nd Supp.); am. c. 10 s. 65 (Item 2s).
61. *Ibid.* s. 3.
62. *Ibid.* s. 2.
63. *Ibid.* s. 7, 8, 9, 10.
64. *Ibid.* s. 7(2).
65. S.C. 1970, c. 10 s. 65 (Item 25).
66. S.C. 1970, c. 28 s. 15.
67. For instance, in a review of fourteen federal statutes it was found that hearings were only required in two cases. One of these being the Northern Inland Waters Act discussed above. See, Matkin, "Environmental Policy Formulation: Public Participation and the Role of the Courts," (1973) in Burns, Franson, Matkin and Slutsky, *Environmental Abuse and the Canadian Citizen*, 80-88 (Unpublished Manuscript on file at U.B.C. Law Library).
68. See, "Waste Discharge Permits: No Defence to Water Pollution Actions" (1971) 2 Env. Law, 181. A licence is generally regarded as a privilege to do an act which would be otherwise unlawful. A licence can usually be revoked by simple administrative action. A right tends to be regarded as something given by the law which thing cannot be taken away, unless formal legal requirements are met.
69. Some jurisdictions have general water quality criteria for specific industries and types of effluent, but no exact standards have been set. Very often these criteria are guidelines only and are in no way binding.
70. [1975] 53 D.L.R. (3d) 321. This case involved an assignment of rights by statute from injured fishermen to the Province of Manitoba pursuant to the Fisherman's Assistance and Polluters' Liability Act. S.M. 1970 c. 32. The action was brought pursuant to the statute which held that a permit to pollute granted by one Province would not bar a suit by the Province of Manitoba in which the injury occurred. In holding, by a bare majority, that such a suit could not be brought the court nevertheless suggested a common law right of action for damages still existed.
71. A good example of this lack of consultation between the provinces is the building of the W.A.C. Bennet Dam in British Columbia. The Dam which was completed in 1971 caused irreparable damage to the Peace-Athabasca Delta in Alberta.
72. Dales, *Pollution Property and Prices* (1968) 86.

CHAPTER IV

PREVENTIVE POLLUTION CONTROL

Preventive Pollution Control

This is not a "true" pollution control system as such but is rather an aspect of most pollution control models currently in use. It is submitted that preventive control merits consideration in isolation as it has been recently given a significant importance in most control systems. This methodology is basically used in Canada to prevent, or at least control, the following: (1) The importation and manufacture of environmentally harmful pollutants; (2) The carrying out of environmentally high risk activities; (3) The construction of new sources of pollution. Examples of legislation dealing with each of these aspects of preventive pollution control will now be considered.

1. Restrictions on the Production and Import of Environmental Contaminants

The Federal Environmental Contaminants Act¹ came into force on April 1st, 1976. This Act requires industry to supply information on contaminants to the federal government, which in consultation with the provinces can ban the use, manufacture, or import of such hazardous products. The Act is residual legislation in the sense that it will only be used if other federal or provincial legislation cannot be invoked to prevent the proliferation of environmental contaminants. This means that the Act is not aimed at products which directly affect human beings; they can be dealt with under existing legislation, but rather at those which can cause indirect harm through ecological upset. The Act is designed to provide an investigative mechanism for contaminants which might threaten the ecological system and ultimately man's use and enjoyment of it.

The major provisions of the Act must be considered. The government may require industry to provide information on contaminants, their rate of release, their effects on human and other life, and what steps exist to control their release.² Where the Minister of the Environment believes a contaminant is in fact or is likely to enter the environment in harmful concentrations he may conduct investigations to test the effect of such a contaminant and to devise means of preventing its release.³ Furthermore in such circumstances the Minister may require industry to conduct specified tests into the contaminant's deleterious effects.⁴ Mandatory reporting of compounds to the Minister is required when over 500 kilograms of a substance is manufactured or imported for the first time. The manufacturer or importer must make such a report within three months after the operation has begun. Only the name of the substance to be manufactured or imported must be disclosed.⁵

Where such investigations indicate that there is a likelihood of contaminants entering the environment in harmful concentrations, the Minister may consult with the appropriate provinces to decide how to prevent or eliminate such a threat, pursuant to the appropriate legal mechanisms.⁶ If no other law provides a remedy, then the contaminant may be added to the class of prohibited or restricted pollutants in the schedule⁷ to the Act.

An Environmental Contaminants Board of Review has been established to provide a forum for objections by industry, and "any other knowledgeable persons" to any order made or regulations issued.⁸ Enforcement of the Act lies in the hands of inspectors who may enter premises and seize samples of contaminants for evidentiary purposes.⁹ The importation or

production of banned contaminants is an offence. Similarly the importation or production of contaminants in quantities in excess of prescribed limits is an offence.¹⁰ Upon conviction a fine of up to \$100,000 or imprisonment for up to two years may be imposed.¹¹ Summary proceedings may only be instituted within one year from the time when the subject matter of the proceedings arose.¹²

At the time of the introduction of the Environmental Contaminants Bill the then Minister of the Environment described it as a "preventive Act to better control chemical substances where a threat to human health or the environment is apprehended."¹³ As the Act presently stands it could conceivably achieve the desired preventive controls for which it was enacted. This note of caution is sounded because the Act is drafted in purely discretionary terms, the operative phrase being "The Minister may" demand information or an investigation. This being so, the Act and the whole preventive scheme is very much determined by the policy the Minister chooses to follow. If he insists that all contaminants must be the subject of real scrutiny then the Act will have a significant preventive impact.

Much could have been done in the drafting of the Act to ensure its effectiveness as a preventive device. The only mandatory reporting provision requires that the name and quantity of any new compound be delivered to the government within three months after its manufacture or importation. How can such a system be claimed as preventive when information is to be reported "after" a contaminant's arrival and possibly after its release into the environment? This provision could simply have demanded that information be provided "before" the contaminant's arrival so that it could have been screened for deleterious effects. Furthermore,

the information demanded, that is the name and quantity of the contaminant, is woefully inadequate. No demand is made for "test results, testing methods and standards used, toxicity, alternatives to the substance and adverse health or environmental effects discovered. . . ." ¹⁴

Clearer guidelines could have been laid down requiring all manufacturers or importers of any potential contaminants to test them or submit to government testing. The present Act only requires such information and testing at the Minister's discretion. This means that retroactive investigations only are likely to occur, well after the deleterious release of a contaminant. It has been suggested that the lack of compulsion in the Act might not render it totally useless as a means of preventive control. ¹⁵

Perhaps as an informal administrative arrangement the government will "require" industry to submit further information. Perhaps receipt of suspicious test results or industry's failure to submit this additional information will activate closer scrutiny and demands for more information in any particular case. Such an informal process, although hit-and-miss, might keep government on top of most potentially dangerous substances, even without a registration and certification system required by law.

But is this likely to occur?

The weakness of the Act lies in its discretionary nature. Only selected contaminants or industries are likely to be the subject of any detailed examination. The rationale for this approach is that to examine all contaminants would require unlimited financial and personnel resources. Even if this point is conceded it is suggested that the public could be enlisted as a monitoring resource. If all importers and manufacturers were required to give information as to the contaminants they are dealing with and such information was published, interested citizens or public

interest groups could scrutinise it and suggest that certain contaminants be reviewed by the Environmental Contaminants Board. The present Act in fact allows information to be withheld if it involves trade secrets or if it is not in the public interest.¹⁶ This claim to privilege is at the discretion of the Minister. Without such information there can be no meaningful public scrutiny or participation in the scheme.

One can only conclude that the Environmental Contaminants Act as it presently stands can only be as powerful as the Minister chooses to make it. In the absence of mandatory provisions for disclosure and testing of contaminants, the Minister, if he so chooses, can deny the Act its role as a preventive statute. Nevertheless this is not to deny the effectiveness of the preventive pollution approach. It is sound common sense to control or stop the importation or manufacture of environmental contaminants. This is the avowed intent of the Act and time will tell if it is achieved.

2. Controls on Environmentally High-Risk Activities

Canada's maritime environment, particularly in northern regions, is generally regarded as one of the most delicate ecological regions in the world.¹⁷ Two nautical events suddenly awakened the federal government to the ecological damage that could and in one case did occur in those regions.

The voyage of the tanker "Manhattan" through the Northwest Passage in 1969 led to the passage of the Arctic Waters Pollution Prevention Act.¹⁸ As its name states, the Act is designed to "prevent" pollution in the northern offshore waters of Canada. The Act is directed towards the prevention of pollution of arctic waters from shipping, land based

installations, and installations on the Canadian continental shelf.¹⁹

The most notable feature of the Act is that "arctic waters" include water one hundred nautical miles from the nearest land north of the sixtieth parallel, as far as the Canadian arctic islands. The western boundary of the legislative scheme is set by the one hundred and forty-first meridian of longitude and the eastern boundary by Greenland.²⁰

There has been some severe questioning as to the validity of such a broad assumption of territorial jurisdiction.²¹ Nevertheless Canada has felt such a large degree of control is necessary and the validity of the Act has not yet been tested in any domestic or international tribunal.

Some brief mention must be made of the major provisions of the Act before its truly preventive aspects are considered. The Act prohibits the deposit of "waste," in quantities in excess of that set by regulation, in arctic waters or islands or on the mainland under conditions where it may enter these waters.²² The Act imposes civil liability for the forbidden deposit of waste. Such liability is absolute and does not depend on the proof of fault or negligence.²³ Joint and several liability may be imposed on the ship owner and the cargo owners.²⁴ Criminal sanctions for breach of the Act are incorporated by way of fines. The penalty for non-compliance with the Act is a maximum of \$5,000 for an individual and \$100,000 for a ship each day the offence continues.²⁵

The preventive provisions of the Act are not designed to stop any shipping or land based activities from taking place in the Arctic. Rather they are there to minimise or prevent pollution of such waters. The Governor in Council may by order prescribe shipping safety control

zones in any specified areas of the arctic waters.²⁶ Within such zones no vessel may operate unless it meets the standards required by the regulations.²⁷ These regulations are extremely technical but relate to, *inter alia*, hull and fuel tank construction, electronic and navigational aids, the personnel manning the ship, the types, quantity and method of stowing any cargo, the freeboard to be allowed and the maps, charts and publications relating to navigation in arctic waters which must be carried.²⁸ Any vessel intending to operate in such a zone must present a certificate evidencing compliance with the requirements set out in the regulations.²⁹ Should a vessel operate in such a zone without the designated equipment, it may be fined up to \$25,000.³⁰ If a ship should get into distress in arctic waters and be in danger of depositing any waste, it must report the danger to the appropriate authorities.³¹ Where the Governor in Council has reasonable cause to believe such a ship poses a pollution threat, he may order the ship or its cargo to be removed or destroyed.³²

The Act is to be primarily enforced by Pollution Prevention Officers.³³ These officers are given the power to inspect installations on the continental shelf, the arctic islands³⁴ and ships operating within safety control zones³⁵ to ensure that the standards prescribed by regulation are met. If the inspecting officer believes on reasonable grounds that a ship does not meet the required safety standards, he may order it not to enter, or to leave the safety control zone.³⁶ Similarly if weather conditions make it extremely likely for a collision at sea to occur, ships may be ordered out of the safety control zone.³⁷ Failure to comply with the order of a pollution prevention officer can result in a fine of \$25,000.³⁸

The second event that awakened the consciousness of the Canadian Government to the danger of maritime pollution was the sinking of the oil tanker Arrow off the coast of Nova Scotia on February 4th, 1970.³⁹ This led to important amendments to the Canada Shipping Act. The preventive nature of these changes was clearly articulated:⁴⁰

It is the intent therefore of the government to ensure that Canada and her people are protected to the highest practical degree from pollution caused by shipping.

and⁴¹

Firstly, to provide broad statutory powers directed towards the prevention of pollution by vessels sailing in Canadian waters. . . .

The provisions of this legislation extend:⁴²

. . . to all Canadian territorial waters south of the sixtieth parallel of north latitude and to all Canadian waters north of the sixtieth parallel of north latitude that are not within a shipping safety controlled zone prescribed pursuant to the Arctic Waters Pollution Prevention Act, and to any fishing zones of Canada prescribed pursuant to the Territorial Sea and Fishing Zone Act.⁴³

The preventive provisions of the amended Canada Shipping Act⁴⁴ are very similar to those in the Arctic Waters Pollution Prevention Act. The Governor-in-Council can make regulations prohibiting the discharge of pollutants (oil being regarded as the most serious pollutant) from all ships in Canadian waters.⁴⁵ Furthermore, he may impose standards governing, *inter alia*, the stowage, types and quantities of pollutants that may be carried in Canadian waters, the navigational equipment to be used on such ships, the qualifications of the ship's personnel and the procedures and practices to be used in carrying pollutants.⁴⁶ The Minister has the power to remove or destroy ships in distress "if he has reasonable cause to believe that a ship is likely to discharge a pollutant."⁴⁷

To enforce these provisions Pollution Prevention Officers⁴⁸ are given the power to board ships to ensure that they comply with the standards set in the regulations. The officer may instruct a ship to proceed along a prescribed route or at a prescribed rate and may even order the ship out of Canadian waters.⁴⁹ This power does not appear to be confined to oil tankers only, but extends to any ship carrying a pollutant (as defined by the Act and regulations).⁵⁰

Canada's maritime pollution prevention legislation represents an innovative attempt to grapple with a demonstrated problem. Any domestic scheme which seeks to regulate or prevent the use of the high seas will be the subject of international criticism. The amended Canada Shipping Act, the Arctic Waters Pollution Prevention Act and the Fisheries Act,⁵¹ have proven to be no exception. They have all been attacked as being unilateral departures from recognised international legal principles. It is conceded that to consider the international implications of these Acts is not to directly consider the merits of the preventive system as such. Nevertheless, it is submitted, that these criticisms must be evaluated as they challenge the whole basis of Canada's most important maritime pollution prevention legislation. Furthermore, considerations of the international aspects of this legislation serve to highlight the real problems of the preventive scheme *per se*, its economic impact and its enforcement.

At the time of the introduction of the amendments to the Canada Shipping Act a special Commons Committee on Environmental Pollution was established. This body heard briefs from various interested groups. One of the biggest opponents to any changes were the owners and operators of international and internal⁵² merchant fleets. Their objection to the

legislation were numerous, but may be summarized as follows:⁵³

1. The powers given to the federal government are in contravention of international law in the following areas:
 - (i) The stipulation that ships in Canadian waters must have specified anti pollution devices exceeds the standards set by international agreement.
 - (ii) The powers given to the Minister in respect of vessels in distress exceed those agreed to under the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution.⁵⁴
 - (iii) The extension of the pollution control regime will interfere with the international legal principles of "Innocent Passage" and "Freedom of the High Seas."
2. Insistence on such stringent legislation may affect the number of persons willing to trade with Canada or enter Canadian waters.

The objections regarding Canada's deviance from accepted international law are the most sound and most difficult to answer. Basically, the Canadian legislation seeks to control the traditional freedom of foreign ships off its coasts. It has done this by unilateral action rather than by accepted international convention. Canada felt compelled to do this to protect its national interests and because it despaired of any readily acceptable international solution. This despair can be traced through Canada's attitude at the I.M.C.O. Convention. Although Canada did not vote against the Convention, the Canadian delegate did express a certain reservation:⁵⁵

My Government considers that there should be only one composite Convention or possibly a combined Convention divided into two parts of which one would deal with the right of intervention. In this format it would not be open to States to adhere to one and to reject the other of the two proposed Conventions depending upon which was either to their advantage or to their detriment. Before dealing with the specific problems, I should

mention also that Canada would prefer to have a more comprehensive Convention dealing with all kinds of pollution and not only with pollution by oil.

Having expressed these objections at an international conference, it should have come as no great surprise to the international community that Canada has found the existing international conventions in this area deficient. The amendments to the Canada Shipping Act do exactly what was expressed in the above reservation.

Canada does have some legal basis on which to justify its action to the world community. The international law doctrine of "national preventive self defence"⁵⁶ allows a nation which feels its national interests are threatened to take unilateral steps in defiance of international law or convention. Canada, which has the largest coastline in the world, an economic interest in unpolluted fisheries waters and a delicate arctic ecology appears to have the necessary grounds on which to base such a claim.

Since the passing of the Arctic Waters Pollution Prevention Act, the focus of the offshore oil problem has shifted. The major companies involved in the "Manhattan" venture have abandoned the arctic route, at least temporarily.⁵⁷ Attention has now switched to the shipping of oil along the Trans Alaska Pipeline, and then down the west coast of Canada to points in the United States just south of the Canadian border. Experts appearing before the Commons Committee on Environmental Pollution have testified that such trips through the Gulf Islands and Georgia Strait are particularly hazardous and could result in major oil spills.⁵⁸ In 1971, the British Columbia legislature passed a vote of disapproval to the transport of oil along the British Columbia coast and asked the federal government:⁵⁹

. . . to use every available resource at their disposal to persuade the American government to use alternative methods of transporting crude oil from Alaska to the United States.

To date the federal government has done little more than protest to the United States federal government. This has not achieved anything as the federal Minister of the Environment admitted:⁶⁰

I just don't have the easy answer. . . . We have been in close contact with Washington. But we don't seem to have been able to bring much influence to bear on this.

If such voyages occur they will be in international waters and American territorial waters and hence beyond the scope of Canada's anti-pollution legislation. In the case of oil pollution in this situation, Canada's only remedies appear to be those contained in the International Conventions relating to oil spills on the high seas. These are the conventions Canada rejected as being inadequate to deal with this very problem. For this reason Bill C-186 was introduced to extend Canada's anti-pollution regime on its east and west coasts.⁶¹ This proposed legislation runs into the same international law objections. Although this Bill has not been passed, the introduction of Bill C-186 served notice that Canada might again be prepared to take unilateral action in its national interest.⁶²

Internal preventive controls can have a significant economic impact. The ship owners objecting to the amendments to the Canada Shipping Act strongly argued that such controls would increase the cost of Canadian products or result in a shipping boycott of the country. As these preventive provisions are not fully operational, one can only speculate on the issue. I would submit that Canada will not dramatically suffer as a result. Canada has many products and resources the world needs and it is unlikely therefore she will be boycotted by all ships.

It is clear though that the imposition of the "oil tax" and satisfaction of regulatory standards will mean higher shipping rates, greater insurance costs and ultimately increased costs to the consumer. These increased costs must be weighed up against the ecological damage the legislation seeks to avoid. If in any cost benefit analysis, protection of waters from pollution is considered highly desirable, then the increased costs must be tolerated if the legislation is to be effective. Furthermore, the public must be educated to realise and accept why such increases in cost may be necessary.

The enforcement of this preventive legislation is entirely dependent on adequate resources and trained personnel being available to inspect polluters. In the domestic situation this should not prove to be a fatal flaw in the system. In the vast area of offshore waters, adequate enforcement becomes a real problem. There is no use claiming sovereignty over huge offshore areas⁶³ if this sovereignty cannot be enforced or the cost of such enforcement becomes prohibitive. It is submitted that the realities of enforcement and its cost and not international opinion will be the factor in determining how far out to sea Canada seeks to extend its sovereignty.

In applying preventive legislation domestically, as was discussed earlier, it was suggested that the enforcement and prosecution process could be helped by provision of more information and the grant of greater citizen standing. In the offshore preventive situation there is no equivalent remedy that can be provided by the domestic forum. Good will and reciprocity are the only basis on which laws can be enforced against persons from out of the jurisdiction, when the coastal state is not in a position to adequately enforce its laws. Despite the weak basis of

such enforcement there are cases which prove it can work. In *Reg. v. Steam Navigation Co. Ltd.*,⁶⁴ the defendant was charged pursuant to a statute of Great Britain for an Act of pollution off the coast of Canada. The Oil in Navigable Waters Act⁶⁵ made it an offence for British registered ships to deposit oil in prohibited sea areas. The British vessel "Huntingdon" was spotted in a prohibited area some 85 miles off the coast of Nova Scotia in the midst of an oil slick. As the vessel had left the Canadian jurisdiction it could not be dealt with in Canada unless it returned to this country. The British Government was informed of the activities of the vessel and the master and ship owner charged on its return to Britain.⁶⁶ The crux of this case is that it involves the domestic enforcement of an international convention. The Canadian maritime preventive scheme is purely domestic. Without international support it is unlikely that similar prosecutions upholding the Canadian legislation will be made. In that case, if Canada chooses to implement fully its preventive scheme on a unilateral basis it must be fully prepared to provide the resources to enforce it.

3. Control of the Construction of New Sources of Pollution

Earlier in this thesis it was pointed out that all Canadian jurisdictions have some form of permit system whereby specified quantities of pollutants may be discharged into the environment. Preventive controls are an integral feature of all permit systems. These controls seek to regulate any new sources of pollution so as to minimise the amount of pollutants entering the environment, or at least to insist that pollutants be so treated that their deleterious effects will be minimised. These preventive controls are usually incorporated as a planning function of

the appropriate government department. They insist that all applicants for a permit to construct a new source of pollution must first submit plant plans for approval to ensure that any desirable abatement features are incorporated in such an undertaking.

The Alberta Clean Water Act⁶⁷ and its regulations⁶⁸ provide a typical model of preventive controls and their attempts to regulate the construction of new sources of pollution. The Act stipulates that no person shall commence the construction of, *inter alia*, waste water treatment facilities, sewage projects and industrial plants without a construction permit issued by the Director of Standards and Approvals.⁶⁹ Alterations to existing facilities are also made the subject of a construction permit. The procedure is outlined in greater detail in the regulations which have been passed to deal with particular sources of water pollution. The Industrial Plant Regulations can be quoted at length to illustrate the type of information that is required before any permit to construct will be granted.⁷⁰

5. (1) The application for a permit shall be made in writing to the Director of Standards and Approvals at least 90 days before construction is proposed to commence.

- (2) An application for a permit must be accompanied by
- (a) information concerning the industrial plant specified in subsection (3);
 - (b) at least one scale plan of the area surrounding the land on which the industrial plant is to be situated, showing the matters specified in subsection (4);
 - (c) at least one scale plan of the land on which the industrial plant is to be situated showing the matters specified in subsection (5);
 - (d) a flow diagram of the matters specified in subsection (6); and
 - (e) a description of the matters specified in subsection (7).

(3) An application for a permit shall contain the following information where applicable, with respect to the industrial plant:

- (a) its general nature;
- (b) the type and quantity of the product resulting from the industrial plant;
- (c) size and capacity of equipment used;
- (d) type and amount of raw materials used;
- (e) type and amount of chemicals used;
- (f) the emission rate and concentration of contaminants produced in total per unit of production;
- (g) the temperature of any sewage, industrial waste or other waste or any combination thereof at points of discharge;
- (h) the different procedures used in the manufacturing, processing or other operation in the industrial plant that produce different rates of contamination;
- (i) the source of the water supply, the amount of water taken in, the amount used and the amount discharged;
- (j) a description of the potential danger of an emergency and accidental discharge of contaminants and the procedures that will be followed following an emergency or accidental discharge.

(4) The scale plan of the area surrounding the land on which the industrial plant is to be situated must show

- (a) the topography of the area,
- (b) the type of buildings in the area,
- (c) property boundaries, and
- (d) the land use of the area.

(5) The scale plan of the land on which the industrial plant is to be situated must show

- (a) the exact location of the processing, manufacturing, storage and other units,
- (b) the location of all other buildings,
- (c) the sewer lines,
- (d) the points of discharge of any contaminant by or from the industrial plant, and
- (e) the location of waste water treatment facilities.

(6) The flow diagram must show

- (a) generally, the processes involved in the industrial plant, and
- (b) the manner in which contaminants are produced by the industrial plant,

- and must be accompanied by a statement of
 - (c) the calculated concentration of every contaminant discharged to the surrounding watershed area,
 - (d) the emission rates and tonnage of water contaminants before and after treatment, and,
 - (e) the chemical composition of all contaminants discharged by or from the industrial plant.
- (7) An application for a permit must be accompanied by
 - (a) a description of the method of control of surface water drainage connected with the industrial plant,
 - (b) a description of the proposed method of and frequency of monitoring wastewater, volume flow rates and concentration of contaminants, and
 - (c) a statement of
 - (i) the raw materials used in the industrial plant,
 - (ii) the finished product resulting from the industrial plant, and
 - (iii) the materials balance of the matters referred to in clauses (i) and (ii) to the actual contaminants discharged respectively to land, air and water.

On the basis of such required information, the Director of Standards and Approvals may issue a construction permit, refuse such a permit, insist the plans be modified, or demand that the polluter locate its plant in a different area.⁷¹ Such information is no doubt required to allow the Director to make the best possible informed decision. How in fact this decision to grant, refuse or modify a construction permit is arrived at can only be a matter of some speculation. The Act and its regulations do not stipulate on what basis the Director must make a decision. There is no statement in the legislation that he must insist on the best possible or best practicable means for the prevention of pollution being incorporated into the plant. What criteria does the Director apply in deciding whether or not to issue a construction permit? The Act defines water pollution as:⁷²

- (i) the presence in water of any water contaminant in excess of the permissible concentration prescribed by the regulation for that water contaminant, or
- (ii) a change of temperature of water in contravention of the regulations.

Presumably as a minimum standard the Director must insist on preventive controls which would not allow pollution, as defined above, to enter any waters. In the current absence of regulations⁷³ setting permissible concentrations of contaminants, even this guideline appears not to bind the discretion of the Director. It has been said that:⁷⁴

If a particular contaminant has not had a standard set in regulatory form then, at least under these Acts and in respect of the unregulated contaminant, no offence can be committed.

This being so it appears that the Director has an extremely wide discretion as to what preventive measures he might insist on in any construction permit. Aside from any general departmental policy, the Director appears free to impose any preventive standards he desires.

There is some argument in favour of such discretion, particularly flexibility. The present system allows the Director to negotiate prevention standards with each potential polluter and the greater the pressure he can bring to bear the more stringent the standards he can impose. One still questions whether this will result in optimum preventive controls being achieved. If this discretion is to be maintained it should be subject to some form of review. The Act allows concentrations of contaminants to be regulated and construction to be licensed without any public participation in such a process. Some provision must be made for the publication of all the information received by the Director in any construction permit application and a mechanism instituted⁷⁵ whereby members of the public might have standing to object to such an application.

The preventive scheme just outlined is only as strong as its administrator chooses to make it. A method must be found to ensure that it is being implemented in the best possible manner in the public's interest. It has been already suggested that a reviewable standard such as the "best practicable means of control" should be the minimum requirement for the issuance of any permit. By making the standard reviewable the terms of the permit can be changed to keep pace with technological development and the findings of any environmental studies into the particular region.

Most preventive legislation was passed after a clear need for control was demonstrated. Until the passage of such legislation sporadic, piecemeal policies which led to a fragmented approach to the problem were in force. The thrust of such legislation is to deal with new sources of pollution. Existing sources of pollution are apparently exempted from its regime.⁷⁶ This may have considerable economic as well as environmental consequences. If stringent preventive requirements are imposed, new polluters will likely incur extra costs in the construction or location of plants and the installation of abatement devices. This in turn could add to the cost of their products and put them at a competitive disadvantage compared with old polluters in the same industry. To some extent these costs could be, although they may not be, offset by financial incentives such as direct grants or tax concessions. The best approach might be to insist that existing sources of pollution should be reviewed with an eye to seeing how their processes can be modified by abatement devices. The cost of such charges to them might well equalise the competitive advantage they might have over new sources of pollution.

The advantages of such a prior approval scheme have been summarised as follows:⁷⁷

This legislation controls pollution at its very source and tends to breed industries which have been conceived in the very spirit of pollution control. This method is also more readily enforceable, since any deviation is from a specific predetermined plan. The onus is on the industry or business to conform with the authority's specifications, and a mere failure to conform is in itself an offence. The elements of the offence are less complicated and the burden of proof is less onerous. The mere fact that plans have to be submitted prior to building or altering a site induces an industry or business to be conscious of pollution. By its very nature an authority established to supervise industry would attract specialised and trained experts of a higher calibre than the "policemen" required to enforce punitive laws. Another factor to be taken into account is that the cost of pollution-protection measures is least in the initial construction stages of development.

Conclusion

In this chapter three facets of preventive pollution control were selected for discussion. The first was an attempt to keep harmful contaminants out of the environment by regulating or preventing their manufacture or importation. The second was designed to control stringently activities in areas of demonstrated high environmental risk, by insisting that all available preventive precautions were taken by those engaged in such activity. The third was instigated to minimise the environmental effects of new stationary sources of water pollution by ensuring that construction plans be first scrutinised in order to ascertain what preventive precautions could be insisted on. Although different objectives were sought by the preventive legislation considered in this chapter, they did manifest certain common problems.

Preventive legislation as its name suggests is designed to stop or minimize pollution before it escapes into the environment. For this avowed intent to be achieved the very best technological information must be developed or obtained in order that it can be incorporated as part of the preventive requirements of any legislative scheme. For example, in the area of environmental contaminants there must be continuing research into and a review of all potentially toxic substances so that their likely environmental effects can be known before their import or manufacture is permitted. If one takes the examples of D.D.T., mercury or asbestos pollution of waters, studies were only made after their deleterious effects manifested themselves. Prevention implies that advance knowledge is a prerequisite to any form of control. Similarly in the maritime environment the regulations imposing standards for the prevention of pollution of the sea will have to be continually revised as new technology is developed for shipping in arctic waters and the prevention of collision at sea.

Reviewable standards can be used for the staged introduction of an ultimate water quality objective or for a reassessment of the objective itself. It must be stressed, however, that reviewable standards will not eventually lead to a complete absence of pollution. Perfect environmental cleanliness is neither desirable nor attainable. The existing and foreseeable technology and the economic structure of society preclude a totally pollution free environment. Furthermore, the environment itself in some cases has become conditioned to accepting certain levels of pollution and to eliminate totally all pollution could produce serious environmental repercussions. This does not imply that standards of environmental cleanliness should not be modified, refined and updated as abatement technology,

pollutants and objectives change.

The concept of reviewable standards in itself poses problems. For instance, under the permit system, all permits to pollute are necessarily issued in the light of existing abatement technology. No permit should demand the treatment of waste in a manner for which the technology does not exist. Should such technology change, as it inevitably will, modification of the terms of the permit should be demanded. This in turn will require the polluter to incur the expense of incorporating such technology into its existing abatement process. This cost might well put such a polluter at an economic and competitive disadvantage as compared to a "new" polluter who can install such equipment more cheaply in the initial construction stage of development. As the concept of reviewable standards connotes an ongoing process, such a "new" polluter will in turn be forced to incur extra costs as standards are changed and new abatement technology is demanded of it in time. This process of modifying environmental behaviour will produce economic disadvantages and disparities between polluters and some form of economic cushioning will become necessary. The only methodology which can be utilized to deal fairly with this problem, which is essentially economic in its effect, is to engraft a series of economic incentives and disincentives into the environmental control scheme that is being used.

Although the next chapter of this thesis is entirely devoted to detailing the mechanics of economic methods of pollution control, some consideration should be given at this time, albeit in broad terms, to the economic measures that can be taken to lessen the impact of technological change and reviewable standards on polluters.

Firstly, the high initial cost of abatement equipment and process modification can be offset directly by a system of grants or subsidies to the polluter or indirectly by the use of tax incentives such as accelerated tax depreciation rates for such equipment.

Secondly, ⁷⁸:

when costs are uncertain, benefits are small or limited, there is an expectation of significant technological improvement or a long time will be needed to install the required control devices, then abatement can be achieved more rapidly, more reasonably and at a lower cost by use of an effluent charge.

In this context an effluent charge means a price which is imposed for any discharge, such a price being determined by the quantity and/or quality of the pollutant discharged. Where such a charge is being used to soften the impact of technological change a differentiation could be made between "old" and "new" polluters. The charge levied on "old" polluters should be "low enough so as not to constitute an unreasonable burden but high enough to ensure rapid progress toward compliance."⁷⁹ On the other hand, "new" polluters should be faced with a much higher charge for any similar wastes they deposit as they have been in a position to incorporate treatment processes for such waste at a lower cost.

A combination of discriminatory effluent charges and direct and indirect economic assistance can be developed so as to ensure the effectiveness of reviewable standards whilst still maintaining a relative economic competitiveness between "old" and "new" polluters. A careful selection of such techniques, bearing in mind the standards sought, the technological change and the nature of the industry, is necessary to ensure the flexibility and fairness which reviewable standards demand.

Pollution control legislation, particularly that which is preventive, must keep pace with scientific and technological development. Such legislation will have to be sufficiently flexible⁸⁰ to allow for such new developments to be incorporated into the existing control scheme. The development of information and technology will have to be based on research by both government and the private sector. Such research is expensive and costs will continue to rise. For instance, in Canada for the year 1966 the amount spent on water pollution research from all sources was \$8.39 million; for 1972-73, the projected expenditure was \$25.1 million; and for 1978-79, \$75 million.⁸¹ This is another one of the costs that society will have to be prepared to pay for environmental preservation. It was earlier suggested that the permit scheme could be effective only after expensive environmental assessments were made. It is likewise suggested that the preventive scheme can only achieve its true objective after much expense and time-consuming scientific and technological research.

The enforcement of preventive controls is very much at the discretion of the appropriate government agency. Provision must be made for information dissemination and standing to object so that the individual exercising the discretion is made aware of his responsibility to the public. To the extent that each contaminant or plan to construct a new source of pollution has to be reviewed the system becomes one of point by point regulation with all its attendant administrative difficulties. It must be reiterated that this problem can also be ameliorated by the grant of standing or some form of judicial review.

Preventive pollution control has a real role to play in any overall scheme of pollution abatement. Its merit lies in the fact that it represents

an attempt to deal with pollution before the event and not after. Standing alone it is inadequate to deal with all potential sources of pollution, but in conjunction with other schemes it is an extremely useful means of combatting pollution.

CHAPTER IV

FOOTNOTES

1. (1975) Bill C-25.
2. *Supra.*, n. 1, s. 3(1)(2).
3. *Supra.*, n. 1, s. 3(3).
4. *Supra.*, n. 1, s. 4(1).
5. *Supra.*, n. 1, s. 4(6).
6. *Supra.*, n. 1, s. 5(1). If no consultation takes place after thirty days following an offer to consult, then consultation with the Province will be waived.
7. *Supra.*, n. 1, s. 5(2).
8. *Supra.*, n. 1, s. 6.
9. *Supra.*, n. 1, ss. 10, 11.
10. *Supra.*, n. 1, s. 8(1)(2)(3)(4).
11. *Supra.*, n. 1, s. 8(5)(a)(b).
12. *Supra.*, n. 1, s. 8(6)
13. *Per*, The Hon. Jeanne Sauve, Federal Minister of the Environment (1976) C.E.L.N. 107.
14. Castrilli, "Environmental Contamination, Corporate Confidentiality and the Public Right to Know" (1976) C.E.L.N. 107.
15. *Ibid.*, 108.
16. *Supra.*, n. 1. ss. 4(4), 6(5).
17. See, Thompson, "The Arctic Environment and Legislation" (1972) 10 Alta. L. Rev. 431.
18. R.S.C. 1970 c. 2 (1st Supp.) In force Aug. 7th, 1972.
19. *Supra.*, n. 18, s. 6(1)(a)(b)(c).
20. *Supra.*, n. 18, s. 3(1).

21. See, Henkin, "Arctic Anti-Pollution: Does Canada make or break International Law" (1974) 65 Am. J. Int. Law 131;
 Bilder, "Canadian Arctic Waters Pollution Prevention Act: New Stresses on the Law of the Sea" (1970) Mich. L. Rev. 69;
 Wikes, "International Administrative Due Process and Control of Pollution--The Canadian Arctic Waters Example" (1971) 2 J. Maritime Law, 499;
 Wikes, "Jurisdiction--Territorial Waters--Arctic Waters Pollution Prevention extends Limited Jurisdiction Over the Northwest Passage" (1970) 4 Vand. Int. J. 67;
 Gold, "Pollution of the Sea and International Law: A Canadian Perspective" (1971) 3 J. Maritime Law 3;
 Emanuelli, "La Pollution Maritime et la notion de passage en offensif" (1973) 11 Can. Yearbook Int. Law 13.
22. *Supra.*, n. 18, s. 4(1)(2) See, Arctic Waters Pollution Prevention Regulations S.O.R. 72-253. Reg. 7.
23. *Supra.*, n. 18, s. 7(1). For a full discussion of the civil liability provisions see Stroppa, "Federal Legislation and Common Law Aspects of Environmental Problems in Canada" (1975) 13 Alta. L. Rev. 18, 23.
24. *Supra.*, n. 18, s. 6(1)(c).
25. *Supra.*, n. 18, s. 18(2).
26. *Supra.*, n. 18, s. 11(1).
27. *Supra.*, n. 18, s. 12(1).
28. *Supra.*, n. 18, s. 12(1)(a). Arctic Shipping Pollution Prevention Regulations S.O.R. 72-426; am. 73-300; am. 74-63; am. 74-436; am. 75-48.
29. *Supra.*, n. 18, s. 12(3).
30. *Supra.*, n. 18, s. 19(2)(a).
31. *Supra.*, n. 18, s. 5(2).
32. *Supra.*, n. 18, s. 13(1).
33. *Supra.*, n. 18, s. 14(1)(2).
34. *Supra.*, n. 18, s. 15(1). All installations in this area may be made the subject of approval by the Governor in Council. See *supra.*, n. 18, s. 10(1)(2).
35. *Supra.*, n. 18, s. 15(3).
36. *Supra.*, n. 18, s. 15(3)(b)(i).

37. *Supra.*, n. 18, s. 15(3)(b)(iii).
38. *Supra.*, n. 18, s. 19(2)(d).
39. See, *Final Report of the Royal Commission on Polluting of Canadian Waters by Oil and the Formal Investigation into the Grounding of the Steam Tanker Arrow* (Information Canada, 1970/72).
40. *Per*, D. Jamieson, Minister of Transport Statement of Intent Concerning Shipping Pollution (Hansard, September 11, 1970).
41. Preamble to Bill C-2, 1970.
42. Stroppa, *supra.*, n. 23, 19. Pollutant Substances Regulations S.O.R. 73-113. Reg. 4(a)(b)(c).
43. R.S.C. 1970, c. T-7.
44. R.S.C. 1970, c. S-9; R.S.C. 1970 c. 27 (2nd Supp.).
45. *Supra.*, n. 44, s. 728. See Oil Pollution Prevention Regulations S.O.R. 71-495; am. 73-500.
46. *Supra.*, n. 44, s. 730(1).
47. *Supra.*, n. 44, s. 729(1).
48. *Supra.*, n. 44, s. 731(1)(2)(3).
49. *Supra.*, n. 44, s. 732.
50. For a detailed discussion of this Act and its Amendments, see Lowry, "The Shipowner and Oil Pollution Liability" (1972) 18 McGill L.J. 577; Lowry, "Amendments to the Canada Shipping Act" (1973) 8 U.B.C. L. Rev. 174.
51. As extended by the Territorial Sea and Fishing Zones Act R.S.C. 1970, c. T-7.
52. *i.e.*, those operating on federal waterways such as the Great Lakes and the St. Lawrence Seaway as contrasted to the high seas. In the case of ships operating on the Great Lakes and the Seaway, it was suggested that the Canadian legislation would clash with the U.S. oil pollution legislation, the Water Quality Improvement Act Pub. L. No. 91-224 (April 3, 1970), which was introduced to deal with pollution from ships in this region. To date no such conflict has emerged.
53. For a detailed tabulation of these criticisms see, *Minutes of Proceedings and Evidence of the Special Committee on Environmental Pollution* (Issues No. 5, 6, 7, 1970 Queen's Printer, Ottawa).

54. This and the other convention and proposal were sponsored by the International Maritime Consultative Organization (I.M.C.O.) at a conference on marine pollution held at Brussels in November, 1969.
55. *Per*, Jamieson, Minister of Transport, Proceedings of the I.M.C.O. Conference, 1969.
56. This doctrine has considerable international legal precedent. The latest example of such a unilateral act was in May, 1973, when Iceland unilaterally declared a fifty mile fishing zone to protect its national economic interests.
See, Green, "International Law and Canada's Anti-Pollution Legislation" (1970-71) 50 Oregon L. Rev. 462, 484;
Sutton, "Pollution Control in the Arctic--National and Multi-national Approaches Compared" (1971) 5 Ottawa L. Rev. 32;
Beesley, "Rights and Responsibilities of Arctic Coastal States: The Canadian View" (1972) 23 Maritime Law 241;
Utton, "Arctic Waters Pollution Act and the Right of Self Protection" (1972) 7 U.B.C. L. Rev. 221;
Klotz, "Are Ocean Polluters Subject to Universal Jurisdiction--Canada Breaks the Ice" (1972) 6 J. Int. Law 706.
57. Humble Oil and its parent company Standard Oil of New Jersey in October, 1970 decided to shelve plans for shipping oil from the arctic to the U.S. east coast.
58. *Minutes of Proceedings and Evidence of the Special Committee on Environmental Pollution* (May 12th, 1971, Queen's Printer, Ottawa).
59. Vote of Disapproval (McDiarmid Motion) (British Columbia Legislature, February 4th, 1971).
60. *Per*, Davis, Minister of the Environment (March 1st, 1971, Edmonton Journal).
61. The introduction of this bill was no doubt a pressure tactic used by the Canadian Government to try and force international agreement, by indicating that Canada was prepared to resort to unilateral actions if necessary. There are those who genuinely feel that as pollution travels long distances at sea, that even a 100-mile zone is inadequate. See, *Minutes of Proceedings and Evidence of the Special Committee on Environmental Pollution* (issue No. 1, Nov. 1st, 1970, Queen's Printer, Ottawa). The "Survival Commission" which represents Canada's major anti-pollution organizations, in a 1,000 page brief to the Commons Committee suggested Canada extend its territorial waters (and consequently its anti-pollution regime from 12 to 400 miles offshore).

62. Canada has not entirely rejected the possibilities of international agreement on the extension of coastal sovereignty. At the 1974 Law of Sea Conference in Caracas, Venezuela, it proposed a 200 mile economic zone, wherein the coastal state would have total management control of all living and inanimate resources. No agreement was reached on this proposal although it was approved in principle. On the possibilities of International co-operation see,
Dwivendi, "The Canadian Government's Response to Environmental Concern" (1973) 28 Int. J. 134;
Beesley, "Canadian Approaches to International Environmental Law" (1973) 11 Can. Yearbook Int. Law 3;
Petaccio, "Water Pollution and the Future Law of the Sea" (1972) 21 Int. & Comp. L. Q. 15;
Newman, "Oil on Troubled Waters: The International Control of Marine Pollution" (1971) 2 J. Mar. Law 349;
"Symposium on International Protection of the Environment" (1971) Tex. Int. L. J. 1.
63. Under the Territorial Sea and Fishing Zone Act (Amendment) S.C. 1970, c. C-45, Canada's three mile territorial sea and nine mile fishing zone was replaced by a twelve mile territorial sea to which the pollution control provisions of the Fisheries Act would apply. The traditionally recognised territorial sea limit has been three miles.

When Canada extended its territorial sea to twelve miles from three miles it added another 80,000 square miles for policing.
64. [1973] 3 All E.R. 849 (C.A.).
65. This Act incorporates the International Convention for the Prevention of Pollution of the Sea by Oil 1954.
66. The owners were fined £2,500 and the master £500.
67. S.A. 1971 c. 17; am. 1972 c. 20 s. 4; am. 1974.
68. See, Alberta, Industrial Plant Regulations 36/73;
Municipal Plant Regulations 37/73;
Swimming Pool Regulations 39/73.
69. *Supra.*, n. 67, s. 4.
70. *Supra.*, n. 67, s. 4.2
71. *Supra.*, n. 67, s. 4(4). Industrial Plant Regulation 7.
72. *Supra.*, n. 67, s. 1(0).

73. Regulations prescribing maximum concentrations of contaminants can be set by the Minister of the Environment, *Supra.*, n. 67, s. 3(1)(a). These regulations may not allow permissible levels in excess of those prescribed by the Provincial Board of Health for the same part of Alberta or for the same water course. *Supra.*, n. 67, s. 3(2). An examination of the Board of Health Regulations indicates that no precise stipulations as to concentrations of permissible contaminants exists. See Regulations Respecting Nuisances and General Sanitation. 95/73; Regulations Respecting the Control of Refuse Disposal Systems 273/71 am.; 7/72.
74. Morley, "The Legal Framework for Public Participation in Canadian Water Management" in *Environmental Management and Public Participation* (1976) 40, 61.
75. In Alberta the public have some basis on which to object to the government's environmental policy. The Environment Conservation Act R.S.A. 1970 c. 125 establishes an Authority to hold public hearings into, *inter alia*, the prevention and control of pollution of natural resources and laws in force in Alberta that relate to or directly or indirectly affect natural resources. This mechanism is only available if the Authority chooses to hold hearings into a particular matter.
76. The Alberta Clean Water (General Regulations) Alta. Regs. 35/73. Reg. 13 have provided for all existing water facilities to come under the new provisions between January 1st, 1975 and January 1st, 1977. This time span is explained by the fact that old permits were issued under the Public Health Act, the Oil and Gas Conservation Act and the Hydro and Electric Energy Act.
77. Tedeschi, "Environmental Law in New South Wales" (1973) A.L.J. 711.
78. Dewees, "Economic Considerations in the Selection of Pollution Control Legislation" (1972) 10 Osg. H. L. J. 627, 646.
79. *Ibid.*, 635.
80. See, Morris, "Environmental Statutes: The Need for Reviewable Standards" (1971) 2 Enviro. Law 75.
81. Bruce and Maasland, *Water Resource Research in Canada, Science Secretariat Special Study No. 5* (Queen's Printer, Ottawa, 1968) p. 64.

CHAPTER V

ECONOMIC METHODS OF
POLLUTION CONTROL

Economics and Pollution Control--An Overview

The traditional methods of dealing with pollution have been the criminal sanction and administrative regulation of the polluter by way of a permit scheme or preventive controls. One of the more recent and contentious approaches has been to regard pollution as an economic disfunction and therefore to seek economic answers to the problem. It has recently been said that:¹

A convincing number of experts in a variety of disciplines assert that the main responses to pollution problems must be economic ones.² In language an economist might use, the need is to introduce into entrepreneurial decision-making, whether private or public, some mechanism for costing the impact of decisions on common property resources such as air, water and the other components of the natural environment. A geographer, J.W. MacNeill, observes in a recent Canadian study that "Indeed, some experts view environmental management largely as a problem of 'internalizing' these external costs."³ Allen V. Kneese, a well-known United States resource economist, argues that "our present environmental problems, at least their environmental aspects, are primarily a result of failures in our system of economic incentives.:

Much of the present decay of the environment can be attributed to the market system, in which certain resources, such as air and water, have been treated as free commodities for waste disposal. In economic theory the fact that the environment could be treated as a free dumping ground for pollutants meant that the effect and cost of such pollution would not be taken into account by the polluter, because it was an external cost which, by definition, he did not have to bear. In other words, despite the fact that industrial and commercial enterprises have been among the major sources of pollution, they have been able to shift its cost outside of the enterprise and impose it on society as a whole.

The nature of the market system has had an important bearing

on our thinking towards the environmental problem.⁴ It has been belatedly recognised that the maintenance of a clean environment costs money. The market system in its allocation of resources has failed to protect the environment largely because it did not attach any monetary value to a clean and healthy environment. The challenge to any economic regulation of pollution is to devise a system whereby pollution costs are internalised and made part of any development decision. This must be done in a manner which is both efficient and equitable to the polluting industries.

If we proceed on the assumption that industry will not or cannot act alone because of market competition,⁵ the system must be changed by the imposition of environmental considerations through economic means. To some extent this has been done by economic disincentives and incentives which must be now considered.

1. Economic Disincentives

As the name implies, these are techniques that can be used to get the polluter to refrain from polluting activities by internalising the cost which such pollution causes to the environment and to society. If economic pressures can be deployed so that it is cheaper for the polluter to cease or abate his polluting activity, rather than continue at his original discharge rate, an internalising of the cost of such pollution should result. The methodologies used to achieve such an internalising of costs are generally referred to as economic disincentives. The following may be characterised as the basic economic disincentives currently in use.

(i) Criminal Fines

Perhaps the most primitive disincentive, but one which has been increasingly emphasised in recent times is the criminal sanction by way of a fine. The maximum fine that may be imposed for acts of pollution or breach

of the terms of a permit has increased dramatically over the last few years. Fines of up to \$100,000 may be imposed, for example, under several federal pollution control statutes.⁶ These provisions for significant monetary penalties coupled with the fact that such fines can be of a continuing nature indicate that not only deterrence but an economic disincentive is sought. The advent of high and continuing fines indicates that the legislature wants it to be made clear that criminal penalties for polluting are not to be summarily dismissed as a cost of doing business. Criminal sanctions as an economic disincentive are still somewhat unsophisticated and might be viewed in economic terms as using a bludgeon rather than a rapier to deal with the problem. They are not economically formalised. Fines and therefore the measure of the economic disincentive still depend on the whim of individual judges, after the prosecution has satisfied the onerous burden of proving guilt beyond a reasonable doubt. If fines are going to be of any significant economic impact it will likely be in the situation where the small or citizen polluter is involved. This observation results from the earlier discussions of criminal sanctions in which it was postulated that the judiciary have been reluctant to impose the maximum fine for pollution on corporations. They have tended to speak in terms of more elusive penalties such as the harm to the corporate image. Until significant fines are imposed it is submitted that criminal sanctions are unlikely to be a severe economic disincentive.

(ii) Stop Orders

The larger corporate polluter has posed more of a challenge to the designer of economic disincentives. Nevertheless a simple disincentive has been formulated to deal with them--the stop order.⁷ If stipulated or permitted levels of pollution are continually exceeded, the polluting

industry can be simply closed down by the issuance of a stop order. In our market system of profit maximisation no enterprise can afford to be non-productive for a sustained period of time; lost sales and broken contracts will produce severe economic repercussions.

There can be little argument that this is an extremely draconian economic disincentive. Unfortunately, it also imposes a collective punishment, a notion which our system of jurisprudence regards with some disfavour. The employees of the polluter who is shut down will soon find themselves laid off work. They, their families and community are all affected by the stop order. Similarly affected are the employees of enterprises that rely on the production from the closed plant. This being so, most stop order legislation is couched in discretionary terms and is made the subject of either strict ministerial approval or judicial review.⁸

The decision in the case of *Re Canada Metal Co. et al. v. McFarlane*⁹ indicates that courts are likely to treat such orders with great circumspection. In this case a stop order was issued by the Ontario Director of the Air Management Branch, Ministry of the Environment because he believed the defendant was discharging lead wastes into the air "considerably in excess of those found in a normal urban environment." The result of this order was that the defendant's plant ceased operations and 300 employees were laid off. The court examined the Director's powers and held that his function of cancelling a licence required him to act judicially and hence *certiorari* would lie against him. Furthermore, in exercising these powers the Director must show that his "reasonable and probable" belief that continued operation of the plant would lead to environmental decay is based on objective facts. On the facts of this case it was held the Director failed to act on objective criteria and the stop order was revoked.

Stop orders are a useful but extreme economic disincentive. They are extreme in that resort to them affects and punishes not just the polluter but a community of innocent persons. For this reason such orders have rarely been resorted to. In most cases some sort of negotiation process has been relied on whereby the industry can remain in business as long as it agrees to modify its polluting behaviour. However, the stop order remains as a very blunt instrument which can be used to pressure those polluters who refuse to negotiate in good faith towards an acceptable system of pollution control.

(iii) Civil Liability

With regard to such an economic disincentive it has been said that:¹⁰

The imposition of legal liability for injury internalises the cost of the injury, forcing the actor to take into account possible damage claims, at least if he is prudent and has other courses of action.

Civil liability for injury wrongfully caused has always been an integral part of our legal system. If a polluting activity has any chance of being the basis of a suit by a third party, then the polluter may well take into account what would otherwise be an external cost. This is likely to be true whether the source of liability is in nuisance, negligence or any of the other common law causes of action. The successful conclusion of such a claim has always been subject to the vagaries of proof, costs and the satisfaction of legal principles such as causation or remoteness. If these problems can be resolved in favour of the claimant then the chances of a successful damage claim are significantly enhanced. The imposition of absolute civil liability, for instance, means that a pollution

action is more likely to succeed and hence the polluter will feel more compelled to modify his behaviour to avoid such a suit. Such a change in his activities will necessarily be designed to minimise the chances or effects of pollution. Furthermore the cost of such changes will be internalised or borne by the polluter before any damage to the environment occurs. Civil liability has always been an economic disincentive to a polluter but a modification in our liability law such as the introduction of absolute liability is even more likely to alert a polluter to the potential economic costs of his actions.

The Arctic Waters Pollution Prevention Act and the amended Canada Shipping Act have to some extent imposed such a disincentive scheme. For instance liability under the Canada Shipping Act is structured on a two tiered system. Once an identifiable and traceable act of pollution has occurred, the ship owner and the pollutant owner will be jointly and severally liable absolutely for all clean up costs and damages suffered by any government or persons to a limit of \$14 million.¹¹ No fault needs to be proved up to this limit. Those persons liable have resort to the limited defences of an act of God, an act of war, the intentional interference of a third party and the negligence of the government in the installation of navigation aids.¹² If fault can be proved on the part of the operator of the ship, liability is unlimited.¹³

To ensure that the polluter will be able to meet any successful claims made against him, the Act provides that a ship owner must have and maintain an insurance policy or indemnity bond sufficient to cover his maximum liability where no fault is proved¹⁴ (i.e., \$14 million). The bond must be such that any claimant can proceed directly against the

guarantor or indemnifier.¹⁵ Failure to carry the prescribed insurance bond¹⁶ will mean that the ship will be prevented from entering Canadian waters.

The imposition of absolute liability and compulsory environmental liability insurance are departures from the normal laws relating to claims for civil damages. It is not a departure without precedent.¹⁷ The ethical basis for the change is the fact that the activity is a high risk one and the potential injury to society and the individual demands that every incentive or disincentive as the case may be, is used to minimise the risk. If liability is absolute, in most damage claims the polluter will automatically have to pay for his polluting activity, albeit through his insurance company. This in turn will adversely affect the cost of his environmental liability policy as the premiums will no doubt relate to his claims record. Similarly the cost of such a policy should decrease as the polluter compiles a good no claims record or demonstrates that he has installed equipment to lessen the risks of pollution. Thus it can be argued that the imposition of such absolute liability particularly in a high risk situation can be an economic disincentive and force an internalising of costs.

(iv) Effluent or Discharge Fees

These are the most sophisticated of the economic disincentives. Assuming that a policy of environmental management has been established and water quality objectives set, effluent fees can be utilized as part of the strategy for achieving the aims and objectives prescribed. At the start of this chapter, it was mentioned that under the contemporary economic regime, water was largely considered as a free resource, and

its pollution would inevitably result unless some controls were exerted over polluters. The core of the effluent fee scheme is to dispel financially the notion that water is a free resource by putting a value on it as an important commodity and charging for its use. The fee that is levied for the use of this commodity as a receptacle for pollutants is designed to reflect all the environmental damage (lost water use, aesthetic decay and general social deterioration resulting from such loss) suffered by a region as the result of any discharges. These damages are then given a dollar value by the economists, usually based on the quantity and type of discharge being made.

Stripped of all its detail, the effluent fee is simply a pricing mechanism whereby a polluter is charged according to the amount of any pollutant that is emitted. The amount of the fee is usually directly proportional to the discharge. Thus an increase in the amount of any pollutant discharged will result in a higher fee and conversely a decrease in the discharge will produce a lower fee.

The simple economic theory¹⁸ underlying such a scheme is that polluters for whom treatment is less expensive than paying the fee will treat their own wastes. They will undoubtedly seek the treatment method that is most efficient for their particular source of pollution. Inevitably this will be a treatment method which reduces their pollution at the least cost to themselves. A spin-off from this will be the development of new technology for pollution abatement by the polluters or other entrepreneurs. Although the research and development costs of such technology may initially be quite expensive, such a cost will likely be of a "one-shot" nature as contrasted with the ongoing effluent fee.

Furthermore, the pollution abatement technology developed by a polluter in response to the imposition of the effluent fee, can in itself become a commercially marketable product for the polluter, thereby offsetting its initial costs.

The effluent fee can be utilised in a variety of ways. The simplest method is the one whereby "a person discharging substance X into the water shall pay an amount equal to Y dollars for every ton so discharged." The quantity of any discharge emitted will be determined by market forces and the individual polluter's response to the effluent fee levied. Fees will be set according to the level of pollution sought. Generally speaking the higher the effluent fee, the greater the incentive for the polluter to shop around for the most efficient method of control. It should be remembered, though, that high fees will not totally abate pollution. Complete pollution abatement is unattainable and unnecessary. Certain polluters will choose to pay the fee, others will choose to substitute the fee by abatement of pollution. The overall water management policy and water quality objectives sought will determine the fee to be assessed for a particular pollutant in a given region.

Dales,¹⁹ has been suggested as postulating an alternative method for implementing effluent fees. Rather than having set fees and leaving it entirely to the discretion of the polluter to pollute and pay, or modify his polluting behavior, it is suggested that limits be placed on the total quantity of any pollutant that can be discharged in a particular area over a given period. This in effect creates a property right in the aquatic environment, for which polluters pay a fee, but the fee is not set directly by an administrative agency (as in the case above) but by the

free market. Ideally a given area, such as a drainage basin, should be evaluated to determine the quantity and quality of various pollutants it might desirably absorb. These quantities of pollutants would be divided into units "each of which is equivalent to every other in terms of the treatment costs imposed by it on the drainage basins,"²⁰ and these units would then be bought and sold as pollution rights on a free market. Only those with purchased rights could discharge into the basin and then only to the extent allowed by the units held. Finally:²¹

The price of the pollution rights would increase as the carrying capacity of the basin reaches its permitted level, and this increase would operate to allocate the pollution rights to the most efficient users.

The great advantage of any effluent fee scheme is that economic factors are used to let the polluter himself decide by what means and to what extent he will reduce his pollution. This removes the coercive element which is inherent in other control schemes and encourages technological innovation. Nevertheless the effluent fee system suffers from two serious problems. Firstly, water quality control objectives must be set, for without these the crucial fees which are to be levied cannot be accurately determined. The setting of such objectives and the gathering of the necessary technical data is an expensive and time consuming business. Secondly, the problems of point by point administration of each polluter remain. Each polluter must be monitored individually to check pollutant discharges on which the fee is assessed. This is not a simple process, monitoring the discharge of pollutants in quantity and quality, even at the source, requires a significant technological and personnel commitment. These problems can be illustrated by

considering the steps which need to be taken for the implementation of effluent fees:²²

1. An ambient water quality standard would be established by the appropriate public agency through some crude evaluation of benefits and costs.
2. A charge would be levied upon waste discharged to the waterway based upon the quantity and strength of the effluent. The charge, derived from readily available information, would not be sufficiently high initially to induce the reduction of waste discharges necessary to achieve the established standards.
3. By monitoring water quality, the effect of the charge would be determined and if an adequate improvement were not achieved, the rate of the charge would be increased. This would be repeated until the standard were achieved.

As a prelude to such a process some inventory would have to be made of the polluters in a region and an evaluation of its pollution absorption capacity. Charges would have to be set and each polluter monitored to establish the number of units of pollutant discharged. It is obvious that such a system demands a significant administrative mechanism. It has been said:²³

The flaw in the user charge system is the absence of an automatic pricing mechanism such as is supplied by exchange in the marketplace. Kneese has described the effluent charge as a "publicly-administered price" for the privilege of discharging wastes.²⁴ This description recognizes that some public administrative system is necessary to determine what standards of pollution are acceptable, what the costs of maintaining these standards will be and how these costs should be apportioned among the various users of the resources so that the proper charge can be levied. Consequently, this kind of manipulation of the market system does not produce the ideal model of a system operating entirely by the free play of self-interest. Before self-interest can be triggered, the device must be armed by the deployment by government of a complex administrative system.

Despite this drawback the effluent or discharge fee is a system which has been successfully used²⁵ and is one which has been considered for extensive use in Canada.

The Canada Water Act²⁶ which introduced the framework for a comprehensive national system for the maintenance of water quality, makes specific provision for the introduction of effluent fees. Regional agencies are given the power to set water quality standards and make recommendations:²⁷

as to the appropriate effluent discharge fees to be paid by persons for the deposit of waste in those waters and the time or times at which and the manner in which such fees should be paid.

Such fees have not been used pursuant to the Act. In fact the Act has been dormant and has only been used to commence studies into different water basins.

Any pollution control scheme to be effective must be based on sound environmental investigation and an adequate administrative structure. The effluent fee system has proved no exception to this rule. Its uniqueness lies in the fact that it represents an economic solution to what has been described as an economic (albeit environmental) problem.²⁸ Herein lies its strength and weakness. To the extent that the effluent charge is expressed in dollars and cents, such economic language is one which is readily understandable by commercial enterprises operating in the profit and loss world of the market place. The ultimate economic goal is thus one in which a further dollar spent on treatment produces savings just equal to a dollar of effluent charge avoided. The weakness of the economic approach lies in the ascribing of monetary values to such intangibles as aesthetics. How can such intangibles be given a monetary value for cost-benefit purposes? This can only be done by ascribing them a rudimentary value and modifying it as the scheme develops--a somewhat hit and miss technique.

To some degree the effluent fee has not enjoyed any practical popularity in Canada because of constitutional problems. The system

very much depends on a charge being levied according to a receiving basin's capacity to absorb pollution. Such basins cut across provincial boundaries. It is suggested that this may in part account for the fact that no province has introduced a system of effluent charges.

The Canada Water Act was passed to allow the federal and provincial governments to overcome these jurisdictional problems and to co-operate in dealing with water pollution on a national basis. The provinces have primary responsibility in the area by virtue of their competence to legislate in respect of "property and civil rights." The federal government has only a residual power based on responsibility for the "national interest."

To support such legislation on the basis of the "Peace Order and Good Government" provisions of the B.N.A. Act²⁹ might be legally feasible but politically suicidal given the delicate state of federal-provincial relations. As has been pointed out by one writer:³⁰

. . . it would take a federal government of unusual courage to take such a step unilaterally.

As a result of these and other limitations, it was felt that uniform national legislation could best be achieved by agreement between the two levels of government. This was felt to be so as:³¹

. . . the only feasible basis for achieving an equitable division of the benefits of this resource. A river is a unit physically and it should be treated as a unit legally and politically in order to ensure the maximum economic benefit to the nation as a whole. . . .

AND³² . . . not just because water resources are important to the nation . . . and not because it would be desirable to administer water uniformly across the country . . . but because it would not be possible for any province by itself to create the kind of all embracing multiadministrative agency that most resource administrators seem to think would be ideal.

Thus, the Canada Water Act has come to be clearly based on a spirit of federal-provincial co-operation. Notwithstanding this spirit of

co-operation the determination of the federal government to enact national water quality standards unilaterally, if necessary, is embodied in section 11 of the Act. Section 11(1) allows the Governor-in-Council to designate any interjurisdictional waters as water quality management areas under the control of a federal agency if the water quality management of those waters has become a matter of "urgent national concern"³³ where:

- (a) The Governor-in-Council is satisfied all reasonable efforts have been made by the Minister to reach an agreement under section 9 with the one or more provincial governments having an interest in the water quality management thereof, and those efforts have failed; or
- (b) Although an agreement was reached under section 9 . . . , the Minister and the appropriate Minister of each provincial government that was a party to the agreement disagreed with the recommendation of the agency with respect to water quality standards for those interjurisdictional waters and were unable to agree on joint recommendations with respect thereto and as a result thereof the agreement under section 9 was terminated.

Although the constitutionality of the Act has been questioned³⁴ it has not been challenged in a court of law.

The working of the Act is clearly dependent on federal and provincial co-operation. Critics have suggested that this is one of the major weaknesses of the whole scheme, as any agreement involves compromise and, therefore, less efficient operation of the Act. It is conceded that this may be so, but it should also be pointed out that a study of the constitutional division of powers shows that agreement is the only real basis on which such a comprehensive Act could be passed and any meaningful effluent fee system introduced. True, the federal government has the power to act unilaterally, but the exercise of this power is tempered by political reality, especially in these times when the provinces are jealous of any interference in their domain.

Agreement and co-operation can be the basis of an efficient anti-pollution scheme. One of the best examples of this is the International Joint Commission created pursuant to the Boundary Waters Treaty of 1909.³⁵ This body consists of representatives of the governments of Canada, the United States and the Great Lakes States and Provinces. It has set standards for Great Lakes areas and had some considerable success in dealing with pollution of the region.³⁶ It operates totally on the basis of agreement.

The background to the Canada Water Act has been dwelt on at some length to indicate how constitutional difficulties might beset the effluent fee or any other inter jurisdictional pollution control scheme. Assuming the Act allows such problems to be overcome, the effluent fee merits consideration as a means of using economic disincentives to deal with pollution.

2. Economic Incentives

These are financial benefits which are given to "non polluting industries engaged in normally pollution-creating activities"³⁷ or to industries that so modify their behaviour as to reduce their pollution output. Such economic incentives as are presently used in Canada take three basic forms.

(i) Cost Subsidy

These benefits are given to polluters to offset the cost of any pollution abatement equipment they install. They usually take the form of forgiveness of sales tax³⁸ or accelerated tax depreciation rates for such equipment. The federal Income Tax Act and regulations³⁹ make specific provision for pollution abatement equipment under their accelerated capital cost allowance program. This allows the cost of such equipment to be

written off in two years. All the provinces except Quebec⁴⁰ and Ontario⁴¹ calculate capital cost allowances in respect of such equipment, along the lines of the federal program. Aside from these provisions "tax incentives have not been heavily relied upon to obtain pollution control objectives in Canada."⁴²

Such a benefit poses a fundamental question. Is it the government's and ultimately the public's responsibility to pay for such prevention? Of course industry does not bear the sole cost of such abatement; these costs are passed on to the ultimate consumer. Tax concessions, however, transfer the cost to the general public regardless of whether they are purchasers of the ultimate product. In other words, tax concessions impose a collective cost sharing in the sense that all citizens pay for the subsidy given. If on the other hand industry itself had to pay for the cost of such pollution abatement equipment, then only the consumer of the product would pay the additional cost which would be reflected in the price of the product. Furthermore the discriminating consumer is likely to shop around for the cheapest product with the possible result that the industry and not the consumer would have to absorb such a cost in order to remain competitive.

Tax benefits also "tend to favour industries that have not yet installed control equipment at the expense of those industries that did so in the past."⁴³ This in effect allows those industries that have done nothing to abate pollution to reap the benefit of the accelerated depreciation provided for in the Income Tax Act. Those industries that have been conscientious in dealing with pollution in the past are penalised. The only answer to this criticism is that if such concessions are seen as desirable they must be implemented at some point in time and there is no time like the present. If these benefits are extended for a long period

of time those polluters who installed equipment without a tax benefit will get such a benefit when they come to replace their existing equipment.

This scheme may also be abused by the use of any treatment devices to obtain the maximum tax loss. Such treatment devices may not necessarily be the best ones to abate pollution. The act merely states that devices for preventing or reducing pollution qualify for the rapid depreciation allowance, without giving any details as to the performance or efficiency of such devices.

Certain industries may derive a double benefit from such tax incentives. Not only could they get an accelerated depreciation but the abatement process might be such that a saleable by-product results. Considerations of equity might dictate that a distinction should be made between abatement procedures treated as the normal cost of production and those which improve efficiency or result in a saleable by-product.

Tax concessions alone are unlikely to induce industry to expend capital on pollution abatement devices which are not revenue producing.⁴⁴ However, as legislation requires the installation of such devices, such tax concessions will become important, especially with regard to marginally profitable industries. Critics may point out that such tax concessions will cause a drop in total tax revenues. This is true, but the alternative costs of pollution clean-ups or defunct industries will probably impose higher economic and social costs on the taxpayer.

(ii) Direct Subsidy

Direct subsidies take the form of cash grants or low cost loans to polluters. In Canada these direct subsidies have traditionally been confined to municipalities needing improved sewage treatment facilities. Any such monies will obviously come from the higher levels of government, hence the large federal and provincial involvement in this area. Federal agencies such as the Central Mortgage and Housing Corporation are empowered to make such grants. Provincial legislation, such as the Saskatchewan Water Pollution Control Assistance Act⁴⁵ and the British Columbia Municipal Treatment Plant Assistance Fund Act,⁴⁶ makes special provision for grants to municipalities for water pollution control.

Private polluters can conceivably benefit indirectly from grants to municipalities if they are connected to a municipal treatment scheme. Companies that could adequately treat their wastes might avoid some of the costs involved by depositing their wastes in a municipal system. Although they pay to use the municipal system it may cost less than the installation of adequate treatment facilities in their own plant. The bulk of such treatment cost is thus borne by the municipality and the public at large. To avoid this unfair shifting of treatment costs, legislation should require minimum treatment standards for industrial waste that is ultimately deposited in the municipal treatment system. Ontario, for example, has established guidelines for the treatment of industrial waste prior to its deposit in municipal sewers.⁴⁷

Grants to municipalities are justified when one considers their limited income and the high capital cost of treatment facilities. In Canada municipalities spent \$400 million in 1968 on municipal water and

and sewage treatment plants. This cost is expected to rise to \$870 to \$900 million annually by 1978.⁴⁸ Grants to municipalities to help meet such costs to a certain extent reflect the higher original tax paid by municipal inhabitants. The danger with such grants is that municipalities may be encouraged by them to develop a municipal welfare mentality.⁴⁹ They may tend to adopt any treatment scheme without due consideration for its efficiency or cost. The making of such grants must be tied to exacting technical requirements to ensure that the best value per dollar of grant made is obtained. Furthermore municipalities must be prepared to take the initiative and cut costs by the amalgamation or the sharing of treatment facilities.

Direct aid to private industry has tended to be downgraded because the general feeling of government has been that corporations should bear their own environmental costs. Policies of government grants to corporations exist wherein the cost of pollution control is a factor to be considered in the making of any grant. The Regional Development Incentives Act⁵⁰ is designed to encourage the growth and location of industry in economically depressed areas of the country. The Act allows an incentive grant of up to 20 percent of the capital cost of any plant construction or improvement to be made. In making such a grant one of the factors to be considered is the "probable cost of preventing or eliminating any significant air, water or other pollution."⁵¹ To the extent that this factor is considered and allowance made for it, a grant to private industry for pollution control has been made. The problem with such a grant is that it is really being made for purposes other than pollution control. The policy of the Act is to encourage development not to control pollution. This inconsistency raises serious

questions as to the efficiency of any treatment facilities that will be demanded and financed.

The whole policy of making grants to private industry for pollution abatement is contentious. As legislation requiring harsher environmental protection standards to be met is introduced, so will the treatment cost of polluters rise. To many polluters, especially those operating at a marginal profit level, such increased expenditure could be crippling. The grant is desirable to the extent that it allows the polluter to meet the new standards and keep operating, thereby avoiding the social and economic costs that could result from a plant closure. On the other hand it is argued that as industry creates pollution, it should be responsible for any clean-up or abatement costs. This in effect means that the consumer of that industry's products will end up paying for such expenditure, rather than the public at large.

Assuming direct grants to private industry are considered desirable, further problems arise with regard to the disbursement of such grants. Firstly a decision must be made as to what industries should benefit by such grants. Clearly, a marginally profitable industry whose closure could result in social upheaval should qualify for such a grant, but what criteria should be used to decide if it is a marginal industry? What degree of pollution is required before a grant is made to an industry? Even if such criteria are established an industry may be lax in its pollution abatement in order to qualify for a grant. This is unfair to those industries which have been conscientious in pollution control as it could affect them on the competitive market.

Certain abatement and recycling processes can be commercially profitable despite the initial cost of the necessary equipment. Improved technology allows waste products to be converted into commercially saleable products. Today methods exist by which sewage can be converted into compost, waste mash from food processing plants and breweries into cattle feed, and waste from meat processing plants into fertilizer and high protein animal food. It is conceded that such recycling processes are not available for all waste products but in those cases where it is they should not be the subject of any form of grant. If such a treatment process can be self-financing then industry should bear its cost and not the public.

An alternative to a lump sum is the matching grant. This system has been used with some success in the United States. In December 1969 the United States House-Senate Conferees agreed to appropriate U.S. \$800 million in matching grants for water treatment. The previous year they had only appropriated U.S. \$214 million for such grants. The problem with these grants is to determine what percentage contribution will be sufficient to induce industry into contributing capital. It has also been suggested that these grants may be used to induce a polluting industry to locate in a particular area with a consequent reduction in pollution abatement requirements.⁵² Again such grants may encourage industry to sit back until it qualified for such a matching grant.

The critical issue in deciding if grants should be made to polluters is who should bear the cost of pollution abatement? Should the government and ultimately the citizen taxpayer or the company and ultimately the consumer bear such costs? There are strong arguments to support both

sides in the debate. It is suggested that as pollution affects society as a whole then it is not unreasonable to expect society to have to pay. It has also been suggested that the consumer should consider the cost of pollution control as a legitimate production cost and a necessary part of the price to be paid for any product.

It is submitted that direct grants to private industry, at the present time, are not the best means of dealing with pollution from this source. Aside from the problems of deciding what criteria should govern the issue of such grants, they fail to utilise the pressures that can be generated by the market place. If industry must bear the cost of pollution control and this is reflected in the price of its product, then it will seek the technology which will meet any effluent standards set at the least cost. This will compel industry to invest seriously in environmental research and the development of recycling processes. Thus if industry is forced to bear such a cost it becomes an economic disincentive, which as was pointed out earlier can be a better pollution control technique.

(iii) Adjustment Assistance

This type of assistance consists of direct payments to specific individuals or corporations adversely affected by environmental control policy. Such a payment could be made to individuals put out of work because a plant was closed for failure to meet environmental standards, or it could be made to the polluting plant so it could continue in operation and have the finances to meet the desired standards. This form of aid, which has been used in Canada, is thus primarily directed at protecting labour and capital that would be unemployed whilst remedial

action was taken to meet environmental standards.

For example, on January 10th, 1970, the Federal Minister of Fisheries announced that plants in Saskatchewan were the probable cause of mercury contamination of the Saskatchewan river. Commercial fishing in Lake Winnipeg was stopped. The immediate consequence of this action was to deprive many fishermen of a livelihood. The affected fishermen could take the long and costly legal route of suing the identified polluters. Instead, the federal government announced that it would continue to buy the contaminated fish taken at market prices.⁵³ This is a unique remedy in that it allowed the injuriously affected person to be compensated immediately. This is one significant advantage of the adjustment assistance scheme.

Perhaps the most comprehensive scheme for adjustment assistance is found in the Manitoba, Fishermans Assistance and Polluters' Liability Act.⁵⁴ This legislation allows the minister to make payments to persons engaged in commercial fishing who suffer financial loss by reason of the fact that fishing is no longer possible because of contamination of those waters.⁵⁵ The government may upon such payment take an assignment of any individuals right to sue the polluter.⁵⁶ Should the government choose to sue the polluter the Act provides, *inter alia*, that it is no defence to show the discharge was permitted by an authority out of the jurisdiction.⁵⁷ The decision of the Supreme Court of Canada in the *Interprovincial Co-operatives*⁵⁸ case has effectively excluded any claims by the government in respect of interprovincial pollution. This of course does not mean the end of adjustment assistance. It merely raises serious questions about the financing of the scheme. If the government

could successfully claim against all polluters the scheme could have been almost self-financing. As claims are now limited to polluters in the jurisdiction, the government will have to subsidise the scheme⁵⁹ if it wishes to keep it effectively in operation.

Another problem is how far should such assistance be extended? In the situation considered above, not only fishermen but fish canneries, packing plants and retailers were affected by the ban on fishing. The limits of foreseeability and remoteness of damage have always been vexing for lawyers. It is no less so for proponents of the adjustment assistance scheme. Should those traditional limits of liability govern the extent of any assistance given or should awards be based on equity and demonstrated hardship? The legislation in the area is imprecise on this point. The Quebec scheme allows not only fishermen to claim but also those "engaged in a trade directly dependent on such an undertaking."⁶⁰ The Manitoba Act provides that "any person then or formerly engaged in any capacity in the commercial fishing industry"⁶¹ is to receive payments. It is submitted that in the end result the interpretation of such vague provisions will depend on the finances any government is prepared to commit to its program of adjustment assistance. The less money it has the more restrictive it will be in deciding eligibility for assistance.

Such assistance can be unlimited in scope. If environmental standards imposed caused a permanent shutdown of a polluter then assistance could be provided for: relocation allowances to permit workers to go to areas where employment prospects are better; job training programs and grants to workers to enable them to learn new skills if necessary; and payments to the remaining community suffering loss of revenue.⁶²

On June 27th, 1973, the Alberta Department of the Environment announced a relocation aid plan for industries faced with relocation because of environmental requirements. The essence of the plan is that government aid will be extended to private industries facing unwarranted economic pressures arising from environmental protection standards laid down by the department. Assistance in meeting relocation costs will be based on a formula related to the plant's appraised value. If the plant is worth less than \$1 million the grant would be between 25 percent and 50 percent of the worth of the existing plant excluding land costs. For plants worth over \$1 million assistance would have to be negotiated. The department has, however, set a ceiling on the aid it will give. It expects that no more than two plants a year will be involved at an annual cost of between \$500,000 and \$1 million.

The adjustment assistance scheme is an attempt to deal with the social and economic effects of new stringent environmental standards being imposed and enforced. Aside from a decision as to how far aid should be extended, problems of cost and who qualifies for such help are raised. Cost will be a political decision for the government concerned. Eligibility will likely be confined to those polluters and individuals directly and significantly affected by the enforcement of environmental standards. No exact formula for eligibility has been laid down as each case will very much depend on its facts. To have loose criteria would only encourage industry to be lax in order to qualify for relocation assistance. Rigid requirements could bar legitimate claimants.

Conclusion

In this chapter the economic methods of pollution control were divided into the two broad categories of disincentives and incentives. The former is characterised by the fact that the polluter is forced to pay for any discharges into the environment. The latter provides a system whereby the polluter is paid to stop or reduce his environmental discharges. This difference raises the fundamental question of whether the industry and ultimately the consumer, or the state and ultimately the citizen taxpayer should bear the cost of pollution. To some extent this is a misleading question as most citizens find that they are both consumers and taxpayers and so in either case they have to pay for pollution. This may be so but the question remains as to which of these approaches can best deal with pollution at the least cost to the individual be he consumer or citizen?

No clear answer to this question has been given as no clear policy for dealing with pollution has been formulated. Our present haphazard policies have led to a combination of all types of incentive and disincentives being used. Only when a policy has been developed will we be able to decide on the right combination of economic incentives and disincentives. As one economist has stated:⁶³

. . . economic analysis, which is all but useless in helping us to decide on a policy, is all but indispensable in helping us to decide on the best way of implementing a policy once it has been chosen. The criticism is simply that the best way of implementing a policy is the least costly way, counting all costs: costs to individuals as provincial taxpayers (including the very important cost of administering the scheme); costs to individuals as consumers of goods and services.

CHAPTER V

FOOTNOTES

1. Thompson, "Legal Responses to Pollution Problems--Their Strengths and Weaknesses" (1972) 12 Nat. Res. J. 227, 229.
2. See, *e.g.*, U.K. Royal Commission on Pollution, Rep. of Feb. 1971.
3. MacNeil, Environment Management 16 (1971), Constitutional Study Prepared for the Government of Canada, Information Canada.
4. See, Freeman, Haveman, Kneese, *The Economics of Environmental Policy*, (1973);
 "The Price of Pollution" (1970-71) 39 U.M.K.C. Law Rev. 200;
 Canadian Council of Resource Ministers, *Costs Due to Water Pollution* (Queen's Printer, Ottawa, 1966);
 D'Arge and Hunt, "Environmental Pollution. Externalities and Conventional Economic Wisdom: A Critique" (1971) 1. Enviro. Affairs 266.
5. It should be pointed out that some industry has installed pollution abatement devices of its own volition. It is suggested that many of these devices involve secondary recovery procedures that make them economically feasible or that their installation is for self-serving purposes such as good publicity.
6. See, Arctic Waters Pollution Prevention Act, R.S.C. 1970 c. 2, s. 18(1);
 Canada Shipping Act, R.S.C. 1970 c. 5-9 s. 755;
 Ocean Dumping Control Act, S.C. 1970 s. 13.
7. See, for example, Alberta Clean Water Act S.A. 1971 c. 17 (am. 1972, 1974) Section 7 provides, *inter alia*
Stop orders. (1) Where the Minister is satisfied that any person
 (a) has contravened or is contravening a provision of this Act or a regulation or order under this Act, or
 (b) has failed to comply with an order or direction of the Director of Pollution Control under this Act or under the regulations, or
 (c) owns or operates any plant, structure or thing that is a source of water pollution which the Minister considers to be an immediate danger to human life or property or both, the Minister may issue an order (in this section called a "stop order") to that person in accordance with subsection (2), or
 (d) has contravened a term or condition of a licence.

(2) In a stop order, the Minister may require that person to whom it is directed

- (a) cease the contravention specified in the order, and
- (b) stop any operations or shut down or stop the operation of any plant, equipment, structure or thing, either permanently or for a specified period, and the stop order shall contain the reasons for making it.

8. See *Supra.* n. 7, s. 7(3-12) and the Stop Order Appeal Regulations. Alberta Reg. 9/74.
9. [1974] I.O.R. 577 (Ont. H.C.).
10. *Supra.*, n. 1, 232.
11. R.S.C. 1970, c-5.9, s. 735(4)(c)(i & ii). The figure of \$14 million is arrived at by actuarial estimates, based on the likely tonnage of oil carried and its polluting potential.
12. *Ibid.*, s. 735(1)(b)(i, ii, iii).
13. *Ibid.*, s. 735(4)(d).
14. *Ibid.*, s. 736(1). This is not in force yet as S.O.R./71/321 specifically excepted this section.
15. *Ibid.*, s. 736(2).
16. If the pollution has come from an unknown source or the damage exceeds the amount of the defendant's liability, any injured party may claim against the Maritime Pollution Claims Fund. The fund is presently financed by a tax of 15 cents per ton on all oil moved in or out of Canada by ship. It is estimated that this tax will bring in an annual revenue of \$3 million to the fund.
17. A similar system of absolute liability to a limit of \$100,000 exists as regards the international carriage of persons by air pursuant to the Warsaw Convention.
18. See, Dales, *Pollution, Property and Prices* (1968); Freeman, Haveman, Kneese, *The Economics of Environmental Policy* (1973); Victor, *Economics of Pollution* (1972).
19. Dales, *Ibid.* 93. per Thompson *Supra.*, n. 1, 233.
20. *Supra.*, n. 1, 233.
21. *Supra.*, n. 1, 233.
22. Dorcey, "Effluent Charges, Information Generation and Bargaining Behaviour" [1973] 13 Nat. Res. J. 118.

23. *Supra.*, n. 1, 234.
24. Kneese, "Protecting Our Environment and Natural Resources in the 1970's," *Resources for the Future* (1971 reprint), 195.
25. The most successful instance of the use of effluent fees has been in the cleanup of the Ruhr River basin. See, Kneese, "Water Quality Management by Regional Authorities in the Ruhr Area" (1963) 11 *Papers and Proceedings of the Regional Science Association*, 229, 233; Fair, "Pollution Abatement in the Ruhr District," *Comparisons in Resource Management* (1961) 42.
26. R.S.C. 1970 c. 5 (1st Supp.); am. c. 14 (2nd Supp.).
27. *Ibid.*, s. 13(iv).
28. See, Morse, "Effluent Fees—Cost of Purity: Use of the Effluent Charge in Water Quality Control and Management" (1973) 7 *Val. U. L. Rev.* 169;
Masuda, "Effluent Charge Tax. What It Can and Cannot Do" (1972) 9 *Hawaii Bar. J.* 40;
McFarland, "Strategies in Water Quality Control" (1972) 12 *Nat. Res. J.* 318;
Reed, "Economic Incentives for Pollution Abatement. Applying Theory to Practice: (1970) *Ariz. L. Rev.* 511;
"Effluent Charges: Water Pollution Control" (1970) 4 *J. L. Reform*, 47.
29. Section 9.1 B.N.A. Act.
30. Gibson, "Constitutional Jurisdiction for Water Legislation in Canada" (1969) *Alta. L. Rev.* 73, 86.
31. McKenzie, "Interprovincial Rivers in Canada: A Constitutional Challenge: (1959-63) *U.B.C.L. Rev.* 499, 512.
32. *Supra.*, n. 30, 6.
33. This is clearly a condition precedent to the exercise of unilateral federal action and may be justifiable under the general "Peace, Order and Good Government Power." For discussions as to the extent of this power, see the following:
Jennings, "Constitutional Interpretation—The Experience of Canada" (1937), *Harv. L. Rev.* 1;
Kennedy, "The Interpretation of the B.N.A. Act" (1943), 8 *Camb. L. J.* 146;
Laskin, "Peace, Order and Good Government Re-examined" (1947), 25 *Can. Bar Rev.* 1054;
Richard, "Peace, Order and Good Government" (1940), *Can. Bar Rev.* 243.

34. See, Landis, "Legal Controls of Pollution in the Great Lakes Basin" (1970) Can. Bar Rev. 66; 142;
Stein, "An Opinion on the Constitutional Validity of the Proposed Canada Water Act" (1970) U. of T. Faculty L. Rev. 74;
Systems Research Group, An Opinion on the Constitutional Validity of the Proposed Canada Water Act (Toronto, 1970).
35. International Joint Commission Act R.S.C. 1970, c. I-20.
36. See, Kline, "Intergovernmental Relations in the Control of Water Pollution" (1971) 4 Nat. Res. L. 505;
Bilder, "Controlling Great Lakes Pollution: A Study in U.S.-Canadian Environmental Co-operation" (1972) 70 Mich. L. Rev. 469;
Jordan, "Great Lakes Pollution: A Framework for Action" (1971) 5 Ottawa L. Rev. 65;
"Pollution of the Great Lakes: A Joint Approach by Canada and the U.S." (1971) 2 Calif. West. Int. L. J. 109;
"International Joint Commission (U.S.-Canada) and the International Boundary and Water Commission (U.S.-Mexico): Potential for Environmental Control along the Boundaries: (1973) 6 N.Y.U. J. Int. Law & Politics, 499;
Carter, "The Boundary Waters Treaty of 1909: Does it Provide an Environmental Cause of Action?" (1975) S.D. L. Rev. 147.
37. Tedeschi, "Environmental Law in New South Wales" (1973) 47 A.L.J. 711.
38. See, Ontario Pollution Abatement Incentive Act R.S.O. 1970 c. 352; am. c. 1, 1975.
39. R.S.C. 1970-72-72 c. 63; am. 1972, c. 9; 1973 c. 14 1973 S.O.R./73-432.
40. S.O. 1972, c. 143 s. 24(1)(a).
41. S.Q. 1972, c. 23 s. 119.
42. Lucas, "Legal Techniques for Pollution Control: The Role of the Public" (1971) 6 U.B.C. L. Rev. 167, 177.
43. *Ibid.*, 177.
44. See, *Pollution Control in Canada: Government and Industry Viewpoints*--"Government Financial Support for Industrial Abatement" (1971), 40;
Avins, "Tax Incentives and Pollution: The Need for Hysteria Control: (1972) 58 A.B.A. J. 54;
Reitze & Reitze "Tax Incentives Don't Stop Pollution" (1971) 54 A.B.A. J. 127;
Ferror & Whinston "Taxation and Water Pollution Control" (1972) 12 Nat. Res. J. 307.

45. S.S. 1969, c. 75; am. 1972, c. 122; am. 1974 c. 125.
46. S.B.C. 1969, c. 25; am. 1970, c. 32; am. 1972, c. 38.
47. See, Ontario Water Resources Commission, "Industrial Pollution Control in Municipalities," Guidelines.
48. Bruce and Maasland, *Water Resources Research in Canada, Science Secretariat Special Study No. 5* (Queen's Printer, Ottawa, 1968) 51.
49. Municipalities must take the initiative in the raising of funds for treatment facilities, by bond issues or other similar devices. They should not be encouraged to sit around and wait until they qualify for a grant. An environmentally concerned local citizenry can be utilised to provide financing. A good example of such a project was the cleanup of San Diego Bay in California, by the adjacent municipalities. The cleanup cost a total of U.S. \$60 million of which only U.S. \$2.5 million was provided by the federal government. The rest of the money was raised by a bond issue approved by the local inhabitants.
50. R.S.C. 1970 c. R-3 (am. c. 25, 2nd Supp.).
51. *Ibid.*, s. 6(d).
52. For example, on December 10th, 1970, the Alberta government announced that a new pulp mill was to be built in the province. The company building the mill was to spend \$4 million on pollution control, and the province was to pay expenses (estimated at \$3.2 million) above this figure. This agreement led to charges that the matching grant was merely a bribe to locate a polluting industry in the province, and pollution control standards had been consequently relaxed.
53. Globe and Mail, January 20th, 1970.
54. S.M. 1970, c. 32.
55. *Supra.*, n. 54, s. 2.
56. *Supra.*, n. 54, s. 3(1)(2).
57. *Supra.*, n. 54, s. 4(2).
58. [1975] 53 D.L.R. (3d) 321.
59. In the *Interprovincial Co-operatives* case, the Manitoba government paid out some \$2 million which it never recovered from the polluters and to that extent subsidised the program.
60. S.Q. 1970, c. 50; am. 1971 c. 61 s. 1.
61. *Supra.*, n. 54, s. 2.
62. Freeman, Haveman, Kneese, *The Economics of Environmental Policy* (1973), 148.
63. Dales, *Supra.*, n. 18, 99.

CHAPTER VI

THE ADMINISTRATION, ENFORCEMENT AND
PLANNING PROCESSES IN
POLLUTION CONTROL SCHEMES

1. The Administration of Pollution Control Schemes

(i) Administrative Structures and Interdepartmental Conflicts

The five water pollution techniques considered in this thesis may be synthesized as follows:

- (i) Criminal Sanctions -- Thou shalt not pollute.
- (ii) The Permit System -- Thou shalt pollute only when and how we permit.
- (iii) The Preventive Scheme -- Polluters take care.
- (iv) Economic Disincentives -- As you pollute so you pay.
- (v) Economic Incentives -- We will pay you not to pollute.

Each Canadian jurisdiction contains a combination of one or more of these techniques.¹ Generally, item (ii) forms the core of any scheme and is supplemented by items (i) and (iii) and sometimes items (iv) and (v). Each of these schemes is introduced by a series of statutory enactments. No scheme of environmental protection can be viewed in isolation but each must be evaluated in the context of the institutional organizations which give effect to it.

Selecting the environmental control scheme and setting desired standards is only one facet of any control scheme. Adequate provision must be made for its implementation and administration. Hence, environmental institutions must be established and integrated into the existing government structures. Traditionally each legislative enactment in respect of water pollution was administered by an appropriate department. Thus, several different departments or agencies were involved in the same area, their jurisdictions overlapped, and their interests often conflicted.

For example, in British Columbia more than ten different agencies had powers over the Fraser River estuary.² The result of such a diversification was a lack of cohesive policy and uniform enforcement of anti-pollution legislation. Co-ordination, if it was considered necessary, was attempted through committees which proved inadequate.

Most governments have reacted to this problem by establishing a separate environment department. For example, on June 10th, 1971, the Federal Department of the Environment was constituted pursuant to the Government Organisation Act. This Act attempted to place all departmental activity in the field of environmental protection in the hands of a single department.³ As far as water pollution is concerned, the new department is responsible for administering the Fisheries Act, the Migratory Birds Convention Act, and the Canada Water Act.⁴ In addition to its co-ordinating functions, the department has the following general powers:⁵

1. The right to develop and sponsor new environmental legislation.
2. To promote and encourage the institution of practices which will lead to better protection of the environment.
3. To co-operate with the provincial governments and any other agencies or organisation involved in environment programs.

The creation of an exclusive Department of the Environment theoretically should go a long way towards removing many of the barriers that previously hampered efficient government operation in this area. Yet a single department itself represents a danger that:⁶

Such an all comprehensive and all powerful agency could become an administrative monstrosity.

This argument to some extent can be rebutted by pointing out that such a department is not likely to be the largest federal or provincial government agency; its activities can be aided by experts, independent agencies, and a central information clearing house all directed towards environmental protection.

It is clear that the establishment of a single Department of the Environment is unlikely to cure the problems of interdepartmental coordination and conflicting policy goals. This was recently illustrated at the federal level by the Beaufort sea drilling controversy.⁷ Dome Petroleum applied to the Department of Indian and Northern Affairs for a drilling permit to explore for oil in the Beaufort sea. An environmental study indicated that existing technology could not adequately deal with a blowout should it occur in that region. The report indicated that such a blowout could continue unchecked for up to a year. Although the chances of such a blowout occurring were minimal, the federal Department of the Environment felt that the ecological risks were too high and consequently opposed the permit application. Nevertheless, on April 14th, 1976 the Department of Indian Affairs and Northern Development granted such a drilling permit. Although economic considerations outweighed environmental ones in this case, some impact was made by the existence of a Department of the Environment. Firstly, the Department of the Environment had the standing and considerable authority to speak out for the environment. This is something which no other individual or agency could have done as effectively. Secondly, the Department of the Environment was able to have stringent protection provisions attached to the permit. Dome Petroleum was required to post an environmental liability bond of \$50 million and was allowed to drill only in the periods of least environmental risk. Thus the very existence of

an aggressive Department of the Environment can ensure that environmental factors are considered as part of any development program.

Another administrative attempt at co-ordinating environmental action has been made through the enactment of comprehensive natural environment protection Acts. This could be done either federally or provincially. All areas of resource management could be subsumed under one Act, thereby simplifying the operation of the legislation and preventing the omission of any areas of environmental concern. The purpose of such an Act would be to provide for the protection and conservation of the environment as a totality without exception. The passage of such an Act would in no way require major changes to any existing system of environmental control. The Act would simply define the "environment" as the totality of air, land and water. The protection of each of these components can be carried out under existing legislation to deal with them, but under the general co-ordinating umbrella of a comprehensive environmental protection Act.

This comprehensive legislation differs somewhat from the single Department of the Environment approach in that the autonomy of the component environmental protection agencies is emphasised. A single Department of the Environment, although it operates through various agencies, tends to concentrate power in the hands of the central Ministry. Thus no branch or agency can effectively operate without the consent of the parent body--the Department of the Environment. On the other hand, in the comprehensive natural environment protection situation, the agencies are given a clearly defined mandate and powers which they are free to exercise under the guidance rather than the control of the central Ministry.

The provinces of Manitoba,⁸ New Brunswick,⁹ Ontario,¹⁰ and Nova

Scotia¹¹ have recently enacted such comprehensive legislation. The Ontario legislation has been in force the longest and is worth considering to outline this administrative scheme. The Ontario Environmental Protection Act is administered by the Department of the Environment.¹² It basically provides that no person shall deposit in, add to, emit, or discharge into the natural environment any contaminant in an amount or concentration in excess of that prescribed by regulation.¹³ Nor can any person construct a potential polluting plant without the consent of either the Director of the Air Management Branch of the Department of the Environment, the Director of the Waste Management Branch of the Department of the Environment, or the Water Resources Branch of the Department of the Environment. The Environmental Protection Act then simply goes on to confirm the legislation and powers of government officers in the following areas:

- (i) Motor Vehicle Emission;¹⁴
- (ii) Water;¹⁵
- (iii) Waste Management;¹⁶
- (iv) Herbicides and Pesticides;¹⁷
- (v) Private Sewage Disposal;¹⁸
- (vi) Litter.¹⁹

The result of this structure is that the Department of the Environment, through the agencies listed above, is to have total administrative control of the environmental protection system. The parent department can act as a supervisory body and general clearing house for all activity which has a potential to impinge on the environment. The jurisdiction and autonomy of each branch is clearly set out and its Director given wide powers to act in his particular field.²⁰ The Minister has overall

responsibility for each branch but need get involved only in problems he deems important,²¹ or those which the agency director chooses to refer to him.²² This does not mean the Department has to vet every project. The merit of this structure is that it sets up a central coordinating body which can be used to ensure that each administrative agency is discharging its functions as directed. It also eliminates the cumbersome and unworkable co-ordinating committees that were formerly relied on for information exchange, program development, and administrative co-ordination.

(ii) Constitutional Limitations On Administrative Schemes

This comprehensive legislation has been challenged, strangely enough, on constitutional grounds. Section 14 of the Environmental Protection Act makes it a general offence to "deposit, add, emit or discharge" a contaminant into "the natural environment" if it is likely to endanger, *inter alia*, human, animal, or plant life. The Lake Ontario Cement Company was charged with breaching this section of the Act.²³ Counsel for the company argued that the section of the Act was *ultra vires* of the Ontario legislature as pollution was a matter of urgent national concern and within the jurisdiction of the federal government. In accepting this argument, Glendenning Provincial Court Judge stated:²⁴

Taking all the foregoing into consideration, I feel s. 14 therefore clearly comes within the definition laid down by His Lordship Duff, C.J.C., namely that the subject matter, the protection and conservation of the environment, is of national concern in such sense as to bring it within the jurisdiction of the Parliament of Canada. The section will therefore be ruled *ultra vires*.

The fault with this reasoning is its *a fortiori* nature. The fact that the government of Canada may have jurisdiction over pollution does not necessarily exclude provincial involvement in the same area. This was made

clear by O'Driscoll, J., when the case was appealed to the Ontario High Court.²⁵

In my view, the matters dealt with by s. 14 of the Environmental Protection Act, 1971 are property and civil rights in their origin, local and provincial, and fall within the classes of subjects set out in heads 13 and 16 of s. 92 of the B.N.A. Act, 1867 and do not fall within one of the heads under s. 91 of the B.N.A. Act, 1867.

Having so far survived this constitutional challenge there appears to be no reason in principle why such a comprehensive administrative scheme should not be successful. Practically, there should be no real difficulties as existing administrative agencies would be utilised rather than added to. The significant change should be that they would act in concert.

Earlier in this thesis it was mentioned that the logical administrative unit was the one provided by nature itself--the river basin or watershed area. Our present administrative agencies are limited by provincial and international boundaries. The result of this is described as follows:²⁶

On the administrative side in Canada we find a river basin system regulated, not as a river basin at all but in fragments under a patchwork of incomplete, uncoordinated and often contradictory regimes imposed by local, regional and national levels of Government.

Constitutional and political realities in Canada would appear to militate against such an administrative unit. Neither the provinces nor the federal government have exclusive control over the environment in general and water resources in particular. The provinces would appear to have the predominant role to play because of their jurisdiction over property and local matters. However, provincial jurisdiction stops at provincial boundaries--pollution does not. On the other hand, the federal government has a greater role in environmental affairs than the constitution

would suggest. Even though a province might have jurisdiction to deal with a particular aspect of the environment, it may be practically restrained by lack of finances from adequately dealing with the problem. The federal government has often filled this void by providing financial assistance but has attached conditions to such grants. Out of this relationship a policy of give and take, co-operation, and consultation has developed.²⁷

Such co-operative federalism can be the only base on which the regional basin, as the basic administrative unit, can be developed. The Canada Water Act is evidence of this. This legislation allows water resources in Canada to be administered by both the federal and provincial governments on a regional or basin by basin unit. Although the Act allows such development to proceed no water quality management areas have been established to date, although several federal-provincial basin study agreements have been carried out. The spirit of agreement which characterised the passage of the Act seems to have dissipated. However, there is room for some optimism that agreement on environmental administration can be reached. The atmospheric counterpart to the Canada Water Act is the Clean Air Act.²⁸ Pursuant to this legislation a national system of monitoring air pollution has been agreed to by the federal government and the provinces, and uniform standards of air quality set.²⁹

(iii) The Problem of Administrative Discretion

The administration of current Canadian pollution control legislation is characterised by wide discretionary powers. The setting of effluent standards, water quality criteria and the grant of permits and construction approval is at the discretion of the appropriate administrative agency. None of the current statutes state on what basis a permit should

be issued or new construction approved, although some of them list the information required from each such applicant. Nothing is said about how such information should be evaluated or what criteria should govern such approvals. Governments insist that the environmental situation demands a flexible system of control which can only be achieved by their having wide discretionary powers. It is argued that each environmental problem is unique and hence no fixed solutions exist. Each case must be treated on its own merits. This line of reasoning is extremely persuasive but some limits must be imposed on such discretion. It has been said that:³⁰

The problem with broad unfettered regulatory powers, however, is that it may be an invitation to arbitrariness and capriciousness in the administrative decision-making process.

Such an administrative system reduces pollution control to a bargaining process between the agency and the polluter.³¹ There is no guarantee that the welfare of the environment or the general public interest is represented or considered in such a process. In fact it has been suggested that:³²

Whenever administrators are given large amounts of discretion to develop policy and programs, there is always a danger that the discretion will be exercised in a way that best reflects the interests of those that are regulated. . . . Furthermore by developing a close "working" relationship with their "clientele," the administration neutralizes potential adverse opposition from this powerful group. Thus, there is a danger that policy will be shaped by the polluter who knows what he wants and has ample opportunity to get it.

Some real controls can and must be imposed on this desired discretion and flexibility. Firstly, guidelines can be established setting out minimum standards which must be met in, for example, a permit approval. This has been done to some extent where effluent criteria have been set

for certain classes of polluters. Where such standards exist no permit to pollute can be issued if it results in discharges below the criteria set. Above this minimum requirement the agency retains a discretion to impose further conditions to the grant of any permit. Thus the agency retains the discretion to consider factors such as the extra cost of treatment, the industry's competitive position and the social utility of the polluter. Secondly, the administrative process can be opened out to the public by publishing or at least making available information on programme development, permit and construction applications. This access to information must be coupled with a formalised basis for public hearing or objection, not one which is at the discretion of the agency.³³

There is no doubt that the existing administrative agencies must continue to change to meet the challenge of environmental control:³⁴

If, as many contend, the pollution problem can be met only by a new consciousness of man's relationship with nature, man's administrative and institutional arrangements must undergo radical change to reflect the new consciousness. Even within the context of pragmatic and evolutionary change, as distinguished from radical change, quite profound administrative and institutional restructuring must take place if environmental considerations are to be given high ranking among today's concerns.

The administrative structures have changed in response to such a challenge. The creation of Departments of the Environment and comprehensive environmental protection legislation have produced administrative agencies specifically charged with the task of environmental control. This is a far cry from the proliferation of committees, boards and panels which formerly existed to deal with the problem on an *ad hoc* and fragmented basis. Nevertheless, such a problem demands continuous change as new economic considerations and values, new pollutants and new technology are developed.

The administrative agencies must be opened up to public scrutiny to ensure that all affected interests are considered in the administrative process. Furthermore, the administration of pollution control schemes, particularly on a point by point basis, will demand a great commitment of resources. Sufficient finances and personnel must be provided at all stages of the process otherwise the administration and enforcement of any scheme will become a selective and random process. This will ultimately lead to the degeneration of the scheme into the haphazard process it formerly was.

2. The Enforcement of Pollution Control Schemes

(i) The Current Enforcement Process

At present there are several pollution control models, albeit none of them perfect, from which to select a scheme for comprehensive water management. The majority of the existing schemes are enforced by either criminal sanctions or administrative action, such as revocation of a permit or the issuance of a stop order. Satisfactory compliance with any pollution control scheme is directly dependent on its enforcement processes. The apparent lack of aggressive prosecution which characterises the present regimes raises some serious questions about the enforcement process.

The paucity of criminal prosecutions for environmental breaches is largely explicable by the fact that a process of co-operation³⁵ rather than a resort to sanctions characterises Canadian enforcement agencies. It has been said that:³⁶

. . . the fact is that most of the compliance with environmental standards is being achieved through an information program, or through co-operation between individuals and government. But there are municipalities and individuals which seem to act as if we can only get them to the brink of actually doing something by threatening court action.

The consensual enforcement approach is the ideal.³⁷ Voluntary compliance with standards stops pollution at the "factory fence" and avoids the problem of seeking redress after the damage is done. Prosecution of polluters requires information and the resources for the investigation and detection of polluters. This is an expensive and time consuming process. Practically speaking, most enforcement agencies lack the finances, sophisticated detection equipment and prosecutorial staff.³⁸

It would be utopian to believe that a policy of compliance based on co-operation alone is an adequate means of enforcement. Individuals may agree to standards and simply do nothing about meeting them. The administrative agencies themselves are often lax in setting standards or enforcing laws. This may be due to a variety of factors: a policy directive from the minister, or simply the fear of creating political pressure on the government by taking a hard line.³⁹ To remedy this and to some extent overcome cost problems, individuals or groups must be given the power to bring pressure to bear on such officials and the administrative process, or to proceed directly against the polluter. However, at the present time, this possibility is often precluded because action against the agency by *mandamus* or *certiorari* may simply be barred by a clause prohibiting judicial review of the agency's decision. Alternatively, the discretionary nature of the agency's powers often means that it cannot be reviewed as no positive duty is imposed on the agency.

Direct individual action against the polluter is often frustrated by *locus standi* problems. The problem of standing raises the whole question of who speaks for the environment. Traditional environmental rights are available only to those with some proprietary right that has

been interfered with.⁴⁰ In the absence of such proprietary interest the executive branch of government should act. What happens in the situation where an individual has no proprietary interest and the executive refuses to act? It would appear that an individual would be virtually powerless to bring an action. It is in this situation, primarily, that the whole weakness of the present enforcement situation lies exposed. Some form of general standing is needed to remedy this situation.

In the absence of criminal prosecution or administrative action by the appropriate agency the individual citizen at the present time can only resort to the following mechanisms⁴¹ for the vindication of the environment or the prosecution of polluters.

(a) The common law remedies are available although their inadequacies have been pointed out. Aggressive prosecution of these rights could result in changed judicial attitudes.⁴² Some thought could also be given to the development of new torts based on notions such as "aesthetic damage." The introduction of new torts is not an easy process but it has been suggested that problems like the establishment of objective aesthetic standards are not insurmountable.⁴³ Further thought could also be given to the bringing of private actions in public nuisance but it has been suggested that:⁴⁴

In spite of the obvious plight of the plaintiff, a review of recent Canadian case law suggests that one should not be optimistic about any liberalisation of approach by our courts with respect to the grounding of a private action in public nuisance.

(b) Any individual who has reasonable and probable grounds to suspect that a statute or regulation has been breached may lay an information and prosecute the alleged offender in the criminal courts.⁴⁵ Such a

private prosecution can only be brought if the statute involved does not bar such a procedure. If the statute requires a prosecution to be consented to by any authority it is usually interpreted as barring a private prosecution. Some environmental control statutes are not thus restricted. In theory the private prosecution opens up a whole avenue for individuals to prosecute polluters and ensure the maintenance of standards, particularly in cases where the agency responsible refuses to act. However, private prosecutions are often not brought as it is difficult to prove that a statute has been breached or the terms of a permit violated particularly when the terms of the permit are not made public. This remedy has proven to be illusory and has been infrequently resorted to. The lack of private prosecutions may be further explained by the following:⁴⁶

They may be discouraged from prosecuting by the costs involved, the lack of damages if they win (the fine is paid to the state, not to the prosecutor) and the prospect that the Attorney-General may intervene and drop the action at any time.

Even in cases where the private prosecution has been used it has been subject to uncertain judicial interpretation which has led to a feeling of frustration and a further reluctance to use this remedy.⁴⁷

(c) Class actions are a procedural mechanism whereby an individual can have his claim subsumed by a larger group alleging the same injury. Class actions do not give substantive rights, for any injury alleged still has to be proved. This type of action can be an important tool in the environmental fight as it allows more than individual rights to be considered.⁴⁸ Indirectly in proving each element of the action the rights of a class or the public can be weighed against the activity complained about.

All Canadian provincial and federal court rules⁴⁹ make provision for class actions. For example, the Ontario Rules of Practice state:⁵⁰

Where there are numerous persons having the same interest, one or more may sue or be sued or may be authorised by the court to defend on behalf of, or for the benefit of all.

Such actions do not have a significant judicial history in Canada,⁵¹ although they are increasingly being resorted to by groups representing the poor or consumers. It is possible that environmental groups might attempt to utilise this action; the class action does, however, suffer from various defects because of its historical origins.⁵² The following problems are encountered in such suits.

(1) What is a class? How big or small should it be?

(2) The members of the class must establish their right to maintain an action as a class. In other words they must show a common interest and grievance.

(3) Any remedy granted must be beneficial to the whole class.

These preliminary hurdles have militated against the effectiveness of the class action. Nevertheless if the action can be modified by a change in judicial attitude or by statute⁵³ then it could become an effective means of prosecuting polluters. The real benefit of such an action is that it spreads the cost of litigation over the members of the class, thereby neutralising the cost problem which bedevils the individual plaintiff.

(d) *Amicus Curiae* briefs can be filed by individuals or groups who have an interest in a particular litigation or administrative proposal. They have been much relied on in the United States by environmentalists, but Canada has no real developed practice of filing such briefs. The standing

to file such briefs has not been formalised and is very much at the discretion of the judge trying the case. Chief Justice Laskin of the Supreme Court of Canada has given some indication that his court is not only prepared to consider such briefs, but will actively solicit them from public interest groups in cases of significant public importance.⁵⁴ This expanded use of the *amicus curiae* brief can only be welcomed by environmentalists and further explored as a means of presenting environmental considerations before tribunals.

(e) The private citizen has an extra-judicial means of prosecuting polluters via the consumer boycott. The products of known polluters can be boycotted by sufficiently interested persons. Any such action should be based on factual objective information. Governments have been reluctant to make such information available. For example, in 1970 the federal Department of Energy, Mines and Resources surveyed the phosphate content of detergents on the Canadian market. It refused to release the results of the survey. The result was that Canadian consumers could not boycott high phosphate concentration detergents as the necessary information was not publicly available. It was not until June, 1971 that the federal Environment Minister decided that his department would make all factual information relating to pollution available to the public.

Assuming that the majority of citizens are interested in the maintenance of environmental quality, such information will allow them to be selective in the choice of consumer goods. This selection process together with market pressures could result in the manufacturers of such products having to re-evaluate their production methods so as to produce less pollution or an environmentally less detrimental product.

The release of such information and the threat of adverse publicity and consumer action could be another viable method of enforcing legislative standards at minimal administrative cost and effort. It deserves further consideration by the government and public.

(ii) Modifying the Current Enforcement Process

The majority of Canadian environmental control statutes utilise criminal sanctions as a means of enforcing compliance with the control scheme. The general weaknesses of the criminal law have already been outlined earlier in this thesis. Furthermore, the evidence as to departmental and agency practice indicates that resort is rarely made to even this method of enforcement.⁵⁵ Agencies tend to prefer negotiation with a polluter rather than a confrontation in a court of law. The weaknesses of this highly internalised bargaining process between the polluter and the agency have also been pointed out. In situations of obvious pollution and lack of reaction from the official enforcement agencies, there is little the individual can do. The remedies of the common law action, the class action and the private prosecution are very much circumscribed.

Ideally our legislative schemes should be enforced in a far more practical and subtle manner than through an almost total reliance on the coercive powers of the state via the criminal prosecution. It has been pointed out how economic incentives and disincentives can be manipulated so as to get the polluter to discipline himself and thereby reduce the need for policing and prosecution. These techniques should be developed and made part of the control scheme. If the present enforcement approach

is going to be continued, some thought must be given to modifying it to ensure the effective prosecution of polluters.

Individual involvement in the enforcement process could be increased by providing that any fine recovered as a result of a private prosecution should be paid over to the "successful prosecutor"⁵⁶ to offset any damage he has suffered or costs he has incurred. This to some extent should alleviate the financial burden that dissuades many private prosecutions. Some legislation already evidences such a trend. The English Prevention of Oil Pollution Act 1971,⁵⁷ provides that a court in imposing a fine may direct all or part of it to be paid to any person incurring expenses in removing any pollution or to make good any damage suffered. Although this provision is directed towards cleanup costs, it does allow a court to make some form of compensation to individuals rather than having the fine form part of the state's general revenue. In a similar vein the English Criminal Justice Act 1972 allows a magistrate to order compensation of up to £400 for personal injury, loss or damage in addition to any fine. Thus there is some precedent for suggesting that criminal fines or payments can be made to individuals in respect of damage resulting from criminal activity. It is submitted that it would not be inappropriate to extend such a scheme to cover the costs of successful private prosecutors. There is a danger that such a reward system might well go beyond securing individual enforcement of the control scheme and lead to petty and vexatious prosecutions. Our legal system has safeguards to protect society from groundless accusations. Any Justice of the Peace has the discretion to refuse to issue a summons, the Crown Attorney can intervene and have the proceedings stayed, and the common law allows damages to be recovered for malicious prosecution.

Civil proceedings can issue from a criminal act. Such proceedings do not require the strict standard of proof demanded by criminal actions and allow the individual to collect damages as opposed to the state taking a fine. If problems of standing are overcome, these factors are likely to encourage civil suits for criminal actions and thereby indirectly aid in the enforcement process. The traditional approach in such situations has been to bring an action for breach of statutory duty. There is considerable debate as to whether there is such a tort of breach of statutory duty and how far any such liability, if it is found to exist, extends. Environmental actions for breach of statutory duty are even less likely to succeed in the light of the fact that most statutory provisions are discretionary and not mandatory, thereby often imposing no clear statutory obligation.

This problem could be overcome by legislation clearly establishing the individuals right to sue in respect of a criminal act whereby he has suffered damage. This dovetailing of criminal and civil actions appears in the English Deposit of Poisonous Waste Act 1972.⁵⁸ The Act makes it an offence to deposit, or cause or permit to be deposited, on land any poisonous, noxious or polluting waste which is liable to give rise to an environmental hazard.⁵⁹ The Act then goes on to provide that subject to certain limited defences, civil liability will result if breach of the above penal provision is established.⁶⁰ The making of such an act of pollution into a statutory tort of strict liability allows any individual who has suffered damage the choice as to how he will proceed and seek enforcement of the Act.⁶¹ The possibility of a damages award and the relaxed standing requirements make such civil proceedings particularly attractive to the individual complainant.

The solutions suggested above to the problem of the enforcement of the existing pollution control schemes are directed at increasing the participation of individuals in the enforcement process. Such a need has been demonstrated by the general lack of aggressive enforcement by the official agencies. Such steps can only be regarded as legislative tinkering as they are merely attempts to modify the existing enforcement process. Thought must be given to the grant of a more formalised method by which individuals can be given standing to vindicate the environment and prosecute polluters. This must be coupled with a move away from the almost total reliance on criminal sanctions and the integration of other techniques, such as economic incentives and disincentives, to obtain compliance with the control scheme.

3. The Planning Process in Pollution Control

(i) The Environmental Assessment Process--An Overview

The current Canadian pollution control systems are primarily directed at the abatement of pollution and to this extent they may broadly be described as curative. If it is accepted in principle that prevention can be more efficient than trying to cure the environmental malady some considerable thought must be given to a planning process whereby environmental factors are considered in any development decision. The delicate balance of nature in some areas of the country makes such a requirement all the more urgent as the ecological point of no return may easily be reached. Cure can even become impossible in such a situation.

Many statutes in fact do incorporate planning functions, but they are limited by the objectives of the particular statute.⁶² For instance, zoning legislation is largely concerned with the problems of the permitted use of a given area, and only to this extent are environmental factors considered. The granting of a construction permit under a permit scheme is a planning function but the criteria considered relate only to the aquatic environment. More general considerations such as aesthetics may not be considered. This lack of a formalised strategy for assessing the broad spectrum of environmental factors has meant that each individual agency at its discretion has been left to make its own investigations without resorting to the necessary multidisciplinary evaluation.

If the environment is regarded as a totality then any planning process must deal with it as such. A mechanism must exist whereby the environmental consequences of proposed actions must be identified, evaluated and considered in any development decision. The formal planning tool which has been adopted in several jurisdictions⁶³ for such a process is the "Environmental Impact Statement." This tool is designed to provide information to the decision-maker as to the environmental consequences of any action in the light of prevailing economic, social and political factors.⁶⁴

(ii) The Federal Environmental Assessment Process

Some attempts have been made in Canada to formalise the environmental planning process. A federal "Environment Assessment and Review Process" was introduced on March 14th, 1974.⁶⁵ As of April 1st, 1974, any projects undertaken by federal departments, crown agencies and private companies with federal funding must be subject to environmental impact review.⁶⁶

The federal Environmental Assessment and Review Process⁶⁶ is designed to ensure that:⁶⁷

- (i) environmental effects are taken into account early in the planning of new federal projects, programs and activities;
- (ii) an environmental assessment is carried out for all projects which may have an adverse effect on the environment before commitments or irrevocable decisions are made;
- (iii) the results of these assessments are used in planning, decision making and implementation.

These objects are to be achieved primarily by a process of self assessment whereby each federal department or agency considers the environmental consequences of any of its projects, according to set screening guidelines.⁶⁸ Based on such a screening process one of the following three decisions is possible:⁶⁹

- (i) There are no anticipated adverse environmental effects associated with the project or the anticipated environmental effects are known and are not considered significant;
- (ii) The nature and scope of the potential environmental effects cannot be readily determined during preliminary screening;
- (iii) The anticipated adverse environmental effects are considered to be significant and the project requires a formal environmental review by the Department of the Environment.

If the first of these possible decisions is reached, no further resort to the Environmental Assessment and Review Process is required and the project may proceed. If the second of these possible decisions is reached the project is subject to a more searching departmental or agency review called an Initial Environmental Evaluation.⁷⁰ If this second review indicates that no significant environmental risk is involved in the project, then it may proceed without further environmental assessment. It is only in those cases in which the third of the

these possible decisions is reached, or the Initial Environmental Evaluation suggests that significant adverse environmental impact is likely, that a full Environmental Impact Statement is required.⁷¹

An Environmental Assessment Panel is then struck to deal with each project requiring an Environmental Impact Statement. This panel is responsible for laying down guidelines for the preparation of the Environmental Impact Statement and for its final evaluation. Upon the completion of the assessment process the panel reports its findings to the Minister of the Environment, who must decide whether to accept or reject the recommendations made.⁷² If the report is accepted by the Minister of the Environment the report is made public and the initiating department is charged with carrying out the recommendations made in the report.⁷³

The federal Environmental Assessment and Review Process outlined above is not enshrined in a statute, such as its United States counterpart the National Environmental Policy Act. The Canadian federal scheme is merely "underwritten by a commitment from federal ministers through a Cabinet decision."⁷⁴ This reluctance to set out clearly the federal assessment process in statutory form evidences some reluctance on the part of the federal government to fully commit itself to a defined assessment policy and process. The entire scheme is characterised by a highly internalised self assessment process carried out by each agency or department, which may have policy goals totally in conflict with environmental protection. The Beaufort Sea case again illustrates how such a process of self assessment is likely to produce a finding consistent with the objectives of the affected department, rather than true environmental

concern. The Department of the Environment, which is charged with the task of speaking for the environment, only gets fully involved after the self assessment process and then only if the agency or department finds that there may be adverse environmental effects generated by a project.

The internalised nature of such proceedings effectively screens them from the public. Both the self assessment and Initial Environmental Evaluation are made by the department or agency advancing the project in question. This subjective review is free from any public input. Furthermore "in unusual cases, the ministers involved may decide that it is advisable not to release information on a project."⁷⁵ Thus the public may be kept ignorant even about the existence of a project which may have harmful environmental consequences. The Environmental Assessment Panel, which supervises any Environmental Impact Statement that may be required, is composed of experts selected entirely from within the federal public service.⁷⁶ An Environmental Review Board, composed entirely of members outside the federal public service, may be appointed if the Minister of the Environment decides that the project is one of wide public interest.⁷⁷ The internalised review process is thus likely in most cases to be continued all the way up to the Environmental Impact Statement level and hence to the Minister of the Environment and the Cabinet.

After receiving the Environmental Impact Statement, if one is required, the panel can receive public input by way of hearings and submissions. After such hearings the panel makes its report to the Minister of the Environment, who can choose not to make the report public.

Although the federal government has decided to adopt an environmental planning and assessment process, its effectiveness is questionable in the

light of the criticisms made above. The failure of the Minister of the Environment to be effectively involved in all assessment processes, the internalised nature of the review process and the lack of real standing for the public far from guarantees that environmental consideration will be effectively represented or considered in the planning process.

(iii) The Provincial Environmental Assessment Process

Ontario passed Canada's first comprehensive⁷⁸ Environmental Assessment Act on July 18th, 1975⁷⁹ and this will be considered as the prototype for such provincial legislation. Any proponent of an undertaking to which the Act applies must submit an environmental assessment report to the provincial Minister of the Environment.⁸⁰ Such a report must provide information as to the following:⁸¹

- (a) a description of the purpose of the undertaking;
- (b) a description of and a statement of the rationale for,
 - (i) the undertaking,
 - (ii) the alternative methods of carrying out the undertaking, and
 - (iii) the alternatives to the undertaking;
- (c) a description of,
 - (i) the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly,
 - (ii) the effects that will be caused or that might reasonably be expected to be caused to the environment, and
 - (iii) the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment,
 by the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking; and
- (d) an evaluation of the advantages and disadvantages to the environment of the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking.

Such impact reports will be reviewed by the Minister, who may approve the project or refer it to the Environmental Assessment Board for review.⁸² Proponents or opponents of the project may also request a hearing, but the Minister can reject such applications if he deems them to be "frivolous or vexatious" or if he feels they are unnecessary and would cause undue delay.⁸³ Within twenty-eight days of the receipt of any report by the Assessment Board, the cabinet may vary the whole or part of the decision, substitute their own decision, or require the Board to rehear the matter.⁸⁴

The projects to which the Act shall apply are to be described by regulation. It is believed that in the first year it will apply to most provincial government projects; in the second year to any remaining provincial projects and all municipal projects; and in the third year to private projects.⁸⁵ The Minister still retains the discretion to exempt any undertakings from the operation of the Act if he "is of the opinion that it is in the public interest, having regard to the purpose of this Act and weighing the same against the injury, damage or interference that might be caused to any person or property by the application of the Act to any undertaking."⁸⁶

Despite the fact that the Ontario impact procedures are new and really untested in a practical sense, they have been criticised by both developers and environmentalists.⁸⁷ Nevertheless it cannot be denied that provincial recognition has been given to the need for the development of a formal environmental investigatory process. The structure and administration of the scheme may well be criticised but its very existence, with all its imperfections, should help to make environmental concerns

important in any planning process. Initially governments and later private individuals will have to give due recognition and consideration to previously ignored environmental considerations in any planning process.

(iv) The Structure of the Environmental Assessment Process

Obviously the effective operation and ultimate success of any environmental impact procedure will depend on its institutional structure, review processes, and the degree of public participation. In devising the procedure which will best suit the needs and objectives of any such scheme the following critical questions will have to be asked:

(i) In what circumstances will such a statement be necessary?

(ii) Who will have to file such statements--all developers or just government agencies?

(iii) Who can demand that such a statement be filed--any citizen or just a person adversely affected or only the government?

(iv) Who is entitled to make submissions on the environmental impact of a project--just those parties directly concerned or members of the public at large?

(v) Who will evaluate such statements and decide if the project should be allowed--the courts, administrative agencies, or a special assessment board?

(vi) What sort of evidence must be contained in such statements--environmental information, social information, or economic information?

The answers given to these questions will determine the direction and effectiveness of any environmental impact legislation.⁸⁸

The impact procedure provides an institutional framework within which environmental factors must be considered as part of the planning

process. It also allows an informed decision to be made in terms not only of environmental concerns, but also of alternative courses of action.

Nevertheless it has been said that the environmental impact assessment:⁸⁹

. . . does not itself make decisions, nor does it foreclose the possibility that the ultimate decision may be to pursue a course of action which is environmentally less sound than some other possible alternative.

The ultimate decision as to what should be done with any environmental impact report is left to the politician-decision maker under the legislative schemes considered above. If the process is an open one, which is readily accessible to the public, the politician-decision maker, presumably, cannot ignore environmental considerations. It is not intended to suggest that the environmental impact of any project should veto any development. Rather it is submitted that the institutionalising and making public of the planning process allows the need to balance environmental, economic, social and technological factors to be done in the best possible informed manner.

Conclusion

The imposition of new control schemes and a growing awareness of the dimensions of the environmental challenge resulted in significant changes to the administration, enforcement and planning processes in pollution control.

Since 1970 the federal government and every major province in Canada have established a separate department or agency exclusively dedicated to environmental control and administration. This fact evidences a recognition that the environment poses a special challenge demanding holistic consideration. In addition to administering pollution control

schemes such departments and agencies have the duty of centralising and co-ordinating all environmental activities. Although some degree of co-ordination has been achieved by this administrative structure, the evidence, such as the Beaufort sea case, suggests that inter-departmental co-ordination and conflicting policy goals remain a problem. Such a situation can be alleviated by the development of an administrative process whereby resource development and environmental protection are both fully considered. Within such a structure the process of trading off development and environmental protection considerations would be far more scientific and less prone to the whims of each department. Hearings, such as those on the MacKenzie Valley pipeline indicate a willingness to establish an administrative structure within which environmental, economic, and social concerns can be publicly articulated. Similarly the enactment of legislation demanding environmental impact assessment and public input show a recognition that the administrative and planning processes must be directed towards preventing pollution as well as abating it.

The weight to be attached to any report produced by public hearings or environmental impact assessment is left to the discretion of the politician-decision maker. At present there is no mechanism, except the ballot box which is a dubious means of control, whereby the citizen can force any government to heed such a report and in some cases even make it public. If public participation is seen as desirable in such a process then it must be more than symbolic. Suggestions have been made that the public hearing process has been subverted so that the public can be co-opted rather than involved meaningfully in the administrative and planning process.

For example, the Alberta Environment Conservation Authority⁹⁰ was intended to be an ombudsman like authority, reviewing government policy on environment matters and allowing private citizens to take their individual points of view before it. It has been suggested that its independence has been "emphasized by its corporate capacity."⁹¹ This may have been true when the authority was solely responsible to the Lieutenant Governor-in-Council, but this independence has been somewhat eroded by the fact that in certain crucial investigatory areas it can only act after consultation with the Minister of the Environment and must report back to him. This has led to the charge that the authority is no more than a government vehicle for gauging public opinion on environmental issues, so that the government will know what sort of adverse publicity it is likely to get in relation to any proposed environmental policy. As one lawyer appearing before the authority hearings on land use of the eastern slopes of the Rockies put it:⁹²

More and more the view is prevalently held in this province that the concept of public hearings into environmental matters has been perverted by those who govern us into a process where they simply discover from the public in a very efficient manner just how much they can expect to get away with.

The Environment Conservation Authority itself is not the object of this criticism as it can only act in accordance with its constitution and this it has done. What is being criticised is the way in which the government can and may have treated the results of hearings and advice tendered by the authority. It is conceded that the government is not bound by any recommendations the authority makes. This means that the implementation of such policies and programs will remain in the domains of the respective cabinet ministers. At this stage there is the danger

that such recommendations will be disregarded or muffled by political convenience or expediency. The only part of the Act which may bring the recommendations of the Authority into the public arena and force notice to be taken of them is the provision for tabling the recommendations and reports of the authority in the legislature.⁹³

The result of such symbolic public hearings has often been that:⁹⁴

Governments to date have tended to view environmental impact assessment as a management technique--management of the environment, management of natural resources and not least, management of public opinion.

There can be no guarantee that any government will consistently make environmentally sound development decisions. Public participation to the fullest extent in the administrative-planning process can ensure that the government will at least be put in a position to make informed decisions, without manipulation of the public. Our present political and administrative structure places the ultimate decision making power in the hands of the politician. This being so the citizen must demand sound leadership from such individuals to whom they have delegated such a responsibility. It has been said that:⁹⁵

Change on this scale can neither be coerced nor prevented. But since we are living on the brink of disaster, we must hope that changes of this sort can be encouraged and hastened. Political leaders who feel these thoughts in their bones will have to speak up (and act).

The rewards of decisive leadership could be our salvation, whereas more of the same means disaster.

On a less philosophical and more pragmatic basis it is necessary to consider further innovations by which the individual in Canada may be enabled to challenge and regulate the activity of administrative agencies, or to get directly involved in the enforcement process.

CHAPTER VI

FOOTNOTES

1. For a discussion as to which combination of approaches to select, see, Dales, *Pollution Property and Prices* (1968); La Forest, "Water Law of the Future" (1973) 51 Can. Bar Rev. 307; Scott *et al*, "Water Allocation in British Columbia: An Economic Assessment of Public Policy" (1972) 7 U.B.C. Law Rev. 247; Dewees, "Economic Considerations in the Selection of Pollution Control Legislation" (1972) 10 Osg. Hall J. 627.
2. Franson and Burns, "Environmental Rights for the Canadian Citizen: A Prescription for Reform" (1974) 12 Alta. Law Rev. 153, 154.
3. Government Organisation Act S.C. 1970 c. 14 ss 3, 5.
4. *Ibid.*, s. 30 Schedule I.
5. *Ibid.*, s. 6.
6. Ciriacy-Wantrup, *Resource Conservation (Economics and Policies)* (1963), 349;
See, Anon, "The Case for a Department of Natural Resources" (1961) Nat. Res. J. 23.
7. For a full discussion of this controversy see, (1976), C.E.L.N. 17.
8. Clean Environment Act S.M. 1972, c. 130.
9. Clean Environment Act S.N.B. 1971, c. 3.
10. Environmental Protection Act S.O. 1972 c. 106.
11. Environmental Protection Act S.N.S. 1973 c. 6 (am. 1975 c. 66).
12. *Supra.*, n. 10, ss. 1(g), 3.
13. *Supra.*, n. 10, s. 5.
14. *Supra.*, n. 10, Part III.
15. *Supra.*, n. 10, Part IV.
16. *Supra.*, n. 10, Part V.
17. *Supra.*, n. 10, Part VI.
18. *Supra.*, n. 10, Part VII.
19. *Supra.*, n. 10, Part VIII.

20. For example, see the powers given to the Director of the Waste Management Branch of the Ministry of the Environment.
Supra., n. 10, s. 39.
21. *Supra.*, n. 10, s. 3.
22. These may in turn be referred with the Minister's consent to the Environmental Council for consideration. *Supra.*, n. 10, s. 10(2).
23. *Reg. v. Lake Ontario Cement Ltd. et al.* (1973), 10 C.C.C. (2d) 141 (Ont. Prov. Ct.).
24. *Supra.*, 147.
25. *Reg. v. Lake Ontario Cement Ltd. et al.* (1973), 11 C.C.C. (2d) 1, 8 (Ont. H.C.).
26. Thompson, "Legal Responses to Pollution Problems--Their Strengths and Weaknesses" (1972) Nat. Res. J. 227, 235.
27. See, Morley, "A Co-operative Approach to Pollution Problems in Canada" (Paper presented to the Society of Engineering, 1st International Meeting, Tel Aviv, 1972);
Stein, "Environmental Control and Different Levels of Government" (1971) Can. Pub. Ad. 146;
Simeon, *Federal-Provincial Diplomacy: The Making of Recent Policy in Canada* (1971) 312;
Van Loon and Whittington, *The Canadian Political System. Environment, Structure and Process* (1971) 486.
28. S.C. 1970-71-72, c. 47.
29. See Ambient Air Quality Objectives S.O.R. 74-325; 75-32.
30. Emond, "A Critical Evaluation of the Nova Scotia Environmental Protection Act" (1975) U.N.B.L.J. 69, 74.
31. See, Holden, *Pollution Control as a Bargaining Process* (1966).
32. *Supra.*, n. 30, 82.
33. *Supra.*, n. 30, 82, 83.
34. *Supra.*, n. 26, 235.
35. See, Morley, "A Co-operative Approach to Pollution Problems in Canada" paper presented to the Society of Engineering at its 1st annual International Meeting, Tel Aviv, 1972.
36. Johnston, *Pollution Control in Canada: Government and Industry Viewpoints* (1971) 63.
37. See, Freeman, Haveman, Kneese, *The Economics of Environmental Policy* (1973) 102.

38. See, Roush, "Statutory Water Pollution Control--The Michigan Water Resources Commission Act: Some Observations and Suggestions" (1972) 19 Wayne L. Rev. 131, 155.
39. See, Lucas, "Legal Techniques for Pollution Control: The Role of the Public" (1971) 6 U.B.C. L. Rev. 168, 186.
40. See, Werner, "Enforcement of Water Pollution Control Law" (1972) 6 Law and Soc. Rev. 481;
Cornwell, "From Whence Cometh Our Help" Conservationist's search for a judicial forum for environmental relief" (1971) 23 U. Fla. L. Rev. 451;
"Standing to Sue and the Environment" (1971) 6 Gon. L. Rev. 328;
Rogers, "The Alice in Wonderland World of Standing" (1971) 1 Enviro. Law 169;
Eddy, "Locus Standi and Environmental Control: A Policy for Comparison" (1971) 6 U.B.C. L. Rev. 193.
41. See, Trumbull, "Private Environmental Legal Action" (1972) 7 U.S.F. L. Rev. 27.
42. See, Bryson and McBeth "Public Nuisance the Restatement (Second) of Torts and Environmental Law" (1972) 2 Ecol. L.Q. 241.
43. See, Leighty, "Aesthetics as a Legal Basis for Environmental Control" (1971) 71 Wayne L. Rev. 1347;
"Aesthetic Nuisance" 45 (1970) N.Y.U. L. Rev. 1075;
"Environmental Law: New Legal Concepts in the Anti Pollution Fight" (1971) 36 Mo. L. Rev. 78;
"Environmental Law: Traditional Doctrine and Evolving Theories to Control Pollution" (1973) 4 Wayne L. Rev. 662.
44. Estey, "Public Nuisance and Standing to Sue" (1972) 10 Osg. Hall L.J. 563, 582.
45. See, Kaufman, "The Role of the Private Prosecutor" 7 McGill L. J., 101 Estrin and Swaigen, *Environment on Trial* (1975) 327.
46. *Supra.*, n. 30, 101.
47. See Franson and Lucas, "Environmental Decision Making in British Columbia" in *Environmental Management and Public Participation* (1976) 84, 92.
48. See, Lamm, "Environmental Class Actions Seeking Damages" (1971) 16 Rocky Mt. Min. Law Instit. 59.
49. General Rules and Orders of the Federal Court of Canada. Rule 1711.
50. Rule 75.
51. See, Kazanijan, "Class Actions In Canada" (1973) 11 Osg. Hall L.J. 397.

52. See, Stoljar, "The Representative Action: An Equitable Post Mortem" (1956) 3 Univ. of W. Aust. L. Rev. 479;
Stoljar, "The Representative Action: The Modern Position" (1957) 4 Univ. of W. Aust. L. Rev. 58.
53. There are some indications that the class action may be formalised and allow the recovery of damages in consumer claims. Such changes could also occur in the environmental field. See Williams, *A Proposal For Class Actions Under Competition Policy Legislation* (1976) Information Canada.
54. This was done recently in the case of *R. v. Morgentaler*, [1975] 53 D.L.R. 161 (S.C.C.); and in the *Anti Inflation Act Reference* case [1976], C.C.N. New Developments 91, 80-044 (S.C.C.).
55. See, *Supra.*, n. 30, 102;
Roush, "State Water Pollution Control--The Michigan Water Resources Commission Act: Some Observations and Suggestions" (1972) 19 Wayne L. Rev. 131, 155;
Supra., n. 47, 91.
56. An expression used by Emond, *supra.*, n. 30, 102.
57. Eliz 2. c. 60.
58. Eliz 2. c. 21.
59. *Ibid.*, s. 1.
60. *Ibid.*, s. 2.
61. See, Williams, "Polluting--An Instant Tort" (1973) N.Z. L.J. 254.
62. See, Lucas and McCallum, "Looking at Environmental Impact Assessment" in *Environmental Management and Public Participation* (1976) 306, 307.
63. See, U.S. National Environmental Policy Act 1969, 42 U.S.C.;
Australia, Commonwealth Environment Protection (Impact of Proposals) Act (17 Dec. 1974).
64. See, Clark, "Redcliff and Beyond: The Commonwealth Government and Environmental Planning" (1975) 5 Adel. L. Rev. 165.
65. (1974) 118 H.C. Deb. No. 12, 499-500.
66. For a detailed working of the federal environment impact procedure see, *supra.*, n. 62, 309;
McCallum, "Environmental Impact Assessment: A Comparative Analysis of the Federal Response in Canada and the United States" (1975) 13 Alta L. Rev. 377, 386.
The first environmental assessment panel report was published in late 1975. This related to the New Brunswick Nuclear Generation Station which is to be established under the auspices of the New Brunswick Electric Power Commission and the federal Department of Energy Mines and Resources. As federal funding was involved the project had to be screened by the federal Environment Assessment Panel.

67. See, *A Guide to the Federal Environmental Assessment and Review Process*, Environmental Assessment Panel Ottawa (October, 1976), 2.
68. These guidelines are put out by the Department of the Environment, *Ibid.*, 4.
69. *Ibid.*, 4.
70. *Ibid.*, 6.
71. *Ibid.*, 6.
72. *Ibid.*, 9.
73. *Ibid.*, 11.
74. *Ibid.*, 13.
75. *Ibid.*, 10.
76. *Ibid.*, 8.
77. *Ibid.*, 8.
78. Other provincial legislation contains environmental assessment provisions but not in the comprehensive fashion demanded by the Ontario Act. See Alberta, Environment Conservation Act, R.S.A. 1970 c. 125 (am. 1971, 72), Land Surface Conservation and Reclamation Act, S.A. 1973, c. 34.
79. 1975 (Bill 14).
80. *Supra.*, n. 69, s. 5(1).
81. *Supra.*, n. 69, s. 5(3).
82. *Supra.*, n. 69, s. 7(1), 12(2)(c)(d)(e).
83. *Supra.*, n. 69, s. 7(2), s. 12(2)(b).
84. *Supra.*, n. 69, s. 24(1).
85. Financial Post, June 12th, 1976.
86. *Supra.*, n. 69, s. 30.
87. See, *supra.*, n. 62, 311.
 Editorial, "The Environmental Assessment Act (Bill 14)--Only the Title is Right" (1974) C.E.L.N. 2;
 Editorial, "Ontario Passes Canada's First Environmental Assessment Act: (1975) C.E.L.N. 121.

88. For a model Canadian Environmental Impact Assessment Act, see Castrilli, Estrin and Swaigen, "A Draft Environmental Impact Assessment Statute and Commentary" in *Environmental Management and Public Participation* (1976) 319.
89. *Supra.*, n. 64, 166.
90. Environment Conservation R.S.A. 1970, c. 125; am. 1971, c. 24; am. 1972 c. 38 ss. 7(1)(d)(h), 11.
91. Thompson and Wild, "Maintenance of Water Quality: Alberta's Legislative Scheme and the Common Law" (1972) 10 Alta. L. Rev. 354, 357.
92. Scammell, Environment Conservation Authority Hearings on Land Use of the Eastern Slopes of the Rockies (June 29th, 1973, Edmonton Journal).
93. Environment Conservation Amendment Act S.A. 1972, c. 38 s. 6.
94. Castrilli and Black, "The Need for an Environmental Bill of Rights" (Toronto Globe and Mail, Feb. 7th, 1975).
95. Elder, "The Participatory Environment in Alberta" (1974) 12 Alta. L. Rev. 403, 429.

CHAPTER VII

STRATEGIES FOR DIRECT PUBLIC ACTION

ON THE ENVIRONMENT

Strategies for Direct Public Action on the Environment

It has already been pointed out, earlier in this thesis, how individual action and public participation in the environmental control process is very much frustrated by our present legal and institutional framework. It was also suggested that public participation is both necessary and desirable at all levels of the administrative and enforcement processes. The major difficulties facing such individual action are standing, cost and information retrieval. Some consideration must now be given to devising techniques whereby the individual can be given substantive rights in the environment and these problems can be overcome. It has been said that:¹

We need laws which do not merely give the Government the power to protect the environment--power which it may or may not choose to exercise. Environmental laws must be enforceable in the courts by citizens, if for one reason or another the Government does not act responsibly. Otherwise they are of limited value.

1. Overcoming the Standing Problem

Environmental challenge by a private citizen against the activities of an administrative agency or polluter will inevitably lead to a court of law. Any resort to a court will likely raise the procedural problem of the complainant's standing to challenge the agency's and polluter's actions. The standing issue raises the question of whether the complainant is a proper party to the action. At the risk of being repetitious, it must be pointed out that our present environmental control structure very much precludes individual action on the environment. Much of the legislation puts fact finding in the hands of the agency which usually negotiates with the polluter. Such agencies are not obliged to accept public input,

although the rules of natural justice might suggest that individuals who are likely to be affected by the agency decision should be heard.² If an individual is excluded from such a process resort to the courts is "virtually restricted to the prerogative writs and appeals on questions of law."³ Such actions are likely to involve questions as to the individual's standing to be heard and to challenge the agency's action. The review of the decisions in this area, made earlier in this thesis, indicated that privative clauses and the discretion granted the agency usually inhibited individual standing and hence action. The difficulties of standing which inhibit individual action directly against the polluter by such vehicles as the common law and private prosecution have already been discussed.

Given such a restrictive legal framework and a reluctance or inability by the courts to liberalise standing⁴ or judicial review, some thought must be given to statutory techniques for giving individuals standing to challenge the activities of agencies and polluters.

Much has been written by the proponents of liberalised standing as to why it is ethically, philosophically, politically and practically important for individuals to become involved in environmental action.⁵

Such a position may be best summarised by these words from Professor A.R. Thompson.⁶

Examined from this lawyer's perspective, protection of the environment is seen as an interest that is entitled to representation in the administrative process, as much as, from the economist's perspective, environmental protection is an interest that must be accounted for in the market place. The new insight for the lawyer is that this interest is now being recognised as an interest of individual citizens and groups of citizens, and not merely as the concern of resource users and governments. . . . The argument is that the protection of the public interest exclusively by government agencies, departments and officials is no longer adequate.

The major argument advanced by those that do not favour the granting of increased *locus standi* to individuals is that to do so will open the floodgates of litigation. They fear that this right will lead to petty and vexatious suits that will be a hindrance to the judiciary. To take this approach is to ignore human nature and our judicial system. Presumably, the bulk of the citizenry will exercise any such right in a responsible manner. Furthermore, any litigation will be tempered by financial resources--litigation costs money and requires the services of trained counsel. A responsible counsel will hardly advise the pursuit of an action that has no foundation in fact or law. The threat of costs being awarded against a litigant should also serve to discourage any frivolous suits. These factors should ensure the responsible use of individual action on the environment. There is no doubt that individual challenges to administrative action can cause delays but it has also been suggested that, "the slower decision can become economical over the long term. Participation, in other words, may be cost-effective through cost avoidance, something that may be widely accepted in a few years."⁷

If public participation in environmental control through challenges to administrative action and direct proceedings against polluters is accepted as desirable, then the following techniques for granting standing to pursue such a strategy must be considered.

(i) The Environmental Bill of Rights

The purpose of enacting a Bill of Rights in relation to the environment is to set out all the rights of the individual to a healthy environment and to serve as a basis for the individual to go to court

and challenge any unlawful interference with such rights. By giving an individual a RIGHT to certain features of the environment, he must automatically have some standing in a court of law.

To date no Canadian jurisdictions have enacted an Environmental Bill of Rights,⁸ although such bills have been drafted by various organizations. The Environmental Law Section of the Alberta Branch of the Canadian Bar Association has drafted such a bill, which is worth reproducing in part for consideration of its enactment as part of any legislative scheme.

ENVIRONMENTAL BILL OF RIGHTS

Oct. 12, 1976

WHEREAS it is recognized in Alberta as a fundamental principle and as a matter of public policy that the residents of the Province have the right to enjoy a clean environment the loss or impairment of which is a loss or impairment of an interest that should have legal recognition; and

WHEREAS it is fitting that this principle be affirmed by the Legislature of Alberta in an enactment whereby those rights may be established and means for their protection be given to all persons:

THEREFORE HER MAJESTY, by and with the advice and consent of the Legislative Assembly of Alberta, enacts as follows:

1. In this Act

- (a) "Board" means The Environmental Adjudication Board established by the Environment Conservation Authority pursuant to section 8;
- (b) "environment" means the air, water, soil and any life therein or any other natural resource or any combination thereof;
- (c) "Minister" means the Minister of the Environment;
- (d) "person" means the Crown in the right of the Province or any individual, firm, corporation, society, association, county or municipality or any agency of any of the foregoing or other legal entity resident in the Province;
- (e) "pollutant" means any substance whether solid, liquid or gaseous or any radiation or vibration which is capable of destroying or significantly decreasing the quality of the environment;

- (f) "public trust" means the collective interest of residents of the Province in the quality of the environment and the protection thereof and the heritage therein for future generations;
- (g) "regulation" means a regulation issued pursuant to this Act or any Act listed in Schedule "A" hereto.

GRANT OF STANDING, STATUTORY OFFENCES

2. (1) Notwithstanding any other Act, and subject to sub-section (3) hereof, where any Act listed in Schedule A hereto gives the Crown or the Attorney General the power to enforce the provisions of that Act, every person shall have standing to commence an action against any other person for the prosecution of an offence under that Act in the manner provided in that Act without first obtaining the consent or fiat of the Attorney General and an order that the provisions of the Act be complied with, as if such grant of standing were contained in the Act.
- (2) Before a person may commence an action under sub-section (1) he shall appear before a judge ex parte and satisfy him that
 - a) he has given notice by registered mail of the alleged offence to the Attorney General and the Attorney General has failed to give a written undertaking to commence prosecution of the alleged offence within 60 days of mailing of the notice, or such lesser time as the judge may deem appropriate considering the seriousness of the alleged offence and the consequences of its continuance;
 - b) the information discloses an offence under the Act in question;
 - c) he has significant evidence which relates to the allegations in the information and which is prima facie admissible;
 and the judge, if satisfied under clauses a), b) and c), shall endorse the information with his fiat.
- (3) No information may be laid to commence an action pursuant to sub-section (1) unless endorsed with a judge's fiat pursuant to sub-section (2).

GRANT OF STANDING WHERE NO STATUTORY OFFENCE

3. (1) Notwithstanding that there has been no infringement of a legally established standard, where a pollutant is released into, or is released and subsequently escapes, whether such escape be deliberate, negligent or accidental,

a) into the environment of any property owned or occupied by the Crown, a county or a municipality, any person may commence an action by statement of claim in the Supreme Court against any person who

- i) released the pollutant, or
- ii) had a duty to prevent the release or escape of the pollutant

if that environment or the public trust therein is thereby destroyed or its quality significantly decreased, or if such release or escape if continued is likely to destroy or significantly decrease the quality of the environment or the public trust therein, or

b) into the environment of any property owned or occupied by a person other than the Crown, a county or a municipality then that person may commence an action by statement of claim in the Supreme Court against any person who

- i) released the pollutant, or
- ii) had a duty to prevent the release or escape of the pollutant

if that environment or the public trust therein is thereby destroyed or its quality significantly decreased, or if such release or escape if continued is likely to destroy or significantly decrease the quality of the environment or the public trust therein.

(2) Before a person may commence an action under sub-section (1) he shall appear before a judge and satisfy him that

- a) the allegations if proven would show that a significant harm has been done to the environment, and
- b) he has significant evidence which relates to the allegations and which is prima facie admissible,

and the judge, if satisfied as to clauses a) and b), shall endorse the statement of claim with his fiat.

(3) No statement of claim may be filed to commence an action pursuant to this section unless endorsed with a judge's fiat pursuant to sub-section (2).

(4) Any person who would have had the right to start an action commenced under sub-section (1) may apply to the Court to be joined as a co-plaintiff in any action so commenced.

(5) In an action commenced under this section, if the act complained of is not the subject of any legally established standard the Court may hear evidence as to what standard, if any, should apply to the conduct of the defendant and may order the defendant to comply with such standard.

- (6) Any order of compliance with a standard set by the Court pursuant to sub-section (5) shall be binding on the defendant until a regulation is issued by the Minister which sets a different standard relating to the defendant's conduct in connection with the pollutant in question.

An environmental "Bill of Rights" (such as the one above) provides clear standing for any affected person in a court of law, by specifically stating that any person has the standing to bring an environmental action in the situations outlined. This broad based standing is reinforced by the preamble to the Bill, which states that individuals resident in the province have the right to a clean environment and may litigate any impairment of such an interest as an infringement of basic guaranteed rights.

However, the Bill refines the grant of standing by looking at statutory and non-statutory offences. The former deals with acts of pollution which amount to a breach of a specific environmental protection statute. The latter deals with acts of pollution which do not amount to an infringement of a legally established standard but which nevertheless significantly harm the environment.

Where an offence as defined by statute has clearly occurred it is primarily the obligation of the responsible agency to prosecute such an offence. It was earlier pointed out that too often such agencies, for a variety of reasons, have been reluctant to prosecute such offences. In such a case section 2 of the Bill allows an individual to bring an action, which may proceed after a judge is satisfied of the criteria as set out in section 2 of the Bill. This procedural mechanism allows the individual to pressure the official agency into acting and should it fail to do so allows him to proceed directly against the polluter. Under

such a scheme, no doubt the receipt of a complaint by the official agency will at least cause it to look into the matter as a failure to do will reflect adversely on the agency.

Official agencies have been even more reluctant to act where an act of pollution has not breached a legally established standard. They have tended to take the attitude that if it is not a breach of a clearly defined set of rules they have no basis on which to prosecute, unless a public nuisance manifestly results. Section 3 of the Bill would allow an individual to pursue such a polluter upon the production of significant evidence of such pollution and its harmful effect on the environment. In dealing with such an action the judge, upon the evidence presented, may set a standard which should apply to the polluter's activity, and then direct the polluter to comply with such a standard. This standard will be binding on the polluter until it is replaced by regulation. This procedure again quite clearly allows an individual standing to prosecute cases in an area in which official agencies have been reluctant to get involved.

The Bill clearly defines the environment in terms of the natural environment alone. This definition will exclude some of the problems which arose out of similar legislation which failed to adequately define the term environment. For instance it has been suggested that under the United States Environmental Policy Act the term environment includes manmade structures.⁹ Such a definition would thus allow individuals to bring suits against the builders and developers of visually and aesthetically ugly manmade projects which it is alleged are a blot on the environment. It

is submitted that the approach taken in the Alberta Bill is the correct one and that questions of the manmade environment should be left to planning and zoning regulations.

A Bill of Environmental Rights will force changes to be made by administrative agencies in their attitudes to pollution control. A failure on their part to discharge their enforcement responsibilities will mean that the public will have standing to intervene and exert pressure on the agency, by the threat of adverse publicity or resort to the courts. Should the agency find itself unable to act because of the pressures of point by point regulation of a multitude of polluters, the public can intervene and proceed directly against the offending polluter. The overall effect of this legislation is to maintain pressure on the responsible agency by enlisting the public as a general overseer of the agency, and in the last resort as a prosecutor of the polluter.

The most fundamental problem with this type of legislation is that resort to the courts is necessary before relief can be granted. Aside from problems of vexatious litigation and overburdening the courts, the key question is are the courts the best forum for deciding such issues? Environmental issues can be complex involving sophisticated expert evidence presented by biologists, hydrologists, physicists, chemists, and others. Courts will often be called on to make critical decisions of a scientific and policy rather than legal nature as to permissible levels of pollution. This need not be a fatal objection to the whole scheme. Courts have shown a remarkable ability to decide intricate technical issues, although some thought could be given to the development of an alternate adjudicative body. The experience of the United States courts does indicate such problems can be adequately dealt with by a judiciary,¹⁰ which is used to deciding cases

with broad policy implications. However, the same may not be true for Canadian courts.

The draft Alberta Bill of Environmental Rights has directly confronted the problem of the appropriateness of the judiciary deciding complex environmental and policy issues by allowing the court in any proceeding to refer such questions to an Environment Adjudication Board. The court in any proceedings brought before it under the Bill may, where it deems appropriate, grant an interim injunction and remit any proceeding or question to the Board for its investigation and consideration. Alternatively the court may appoint a neutral expert to investigate and report back on the matter. After such a report has been made by the Board or an expert the court may impose a penalty if one is applicable, grant an injunction, order any damage caused to be repaired, award damages, impose any standards or conditions on the defendant, or make any order which it deems necessary to protect the environment. The merit in this approach lies in the fact that the court remains seised of jurisdiction over such a matter but is clearly entitled to enlist the services of experts. As the process is basically an adjudicatory one in the sense that a decision has to be made as to the validity of competing rights in the environment, it is important that a body equipped and schooled in making such decisions should be the final arbiter on the matter.

The practical reason why such a piece of legislation has not been adopted is simply because of its political and legal implications. Any attempt to entrench or enshrine basic rights, be they environmental or civil, will be contentious. The familiar argument will be raised that such rights are sufficiently well spelled out and protected in the common law and that entrenchment of them in a statute will lead to rigidity and unnecessary litigation. In the environmental field, it has been clearly

demonstrated that the common law is inadequate for the protection of such rights. The statute law has improved the situation but not provided any real *locus standi*. This can only be done by legislation such as the environmental "Bill of Rights."

(ii) The Public Trust Doctrine and the Enactment of a Public Action on Environmental Quality Act

Several United States jurisdictions¹¹ have passed legislation utilising the "public trust" concept.¹² Such legislation provides *locus standi* to members of the public as beneficiaries of the government's public trust to protect the environment. This allows action to be taken regardless of whether they are personally affected by the results of the pollution.

The concept of a public trusteeship rests on three related principles:¹³

First, that certain interests--like the air and the sea--have such importance to the citizenry as a whole that it would be unwise to make them the subject of private ownership. Second, that they partake so much of the bounty of nature, rather than of individual enterprise, that they should be made freely available to the entire citizenry without regard to economic status. And, finally, that it is a principal purpose of government to promote the interests of the general public rather than to redistribute public goods from broad public uses to restricted private benefit.

Recognition of this role by governments will certainly not mean that no development can go forward if these resources are to be interfered with. The public right to public resources will be subject to the reasonable demands of other users. As one writer has put the issue:¹⁴

. . . a public right to clean air will not necessarily be a right to maintain the air as fresh as it is on the top of the highest mountain. Rather, it will be a right to maintain it as clean as it ought to be to protect health and comfort when considered against the demands for spillover use of the air by other enterprises--and with due consideration of the need for such uses, the alternatives available to the enterprisers, existing and potential technology, and the possibility of other less harmful locations.

This is the essence of the public trust doctrine--a recognition that the public at large has an important stake in the quality of the environment. Should the government as trustee of the environment fail in its trusteeship then the public as beneficiaries will be given standing to protect their rights.

Many American states that have enacted environmental rights or public trust legislation¹⁵ have relied on amendments to state constitutions to provide that environmental quality is a fundamental aspect of life. No such avenue is open to the Canadian governments. The only solution for them is to enact specific legislation. In considering such legislation, it is submitted that the Michigan Environmental Protection Act¹⁶ is a possible model for reference.

Professor Sax, the author of the Michigan legislation has stated that its purposes are threefold:¹⁷

. . . to recognize the public right to a decent environment as an enforceable legal right; to make it enforceable by private citizens suing as members of the public; and to set the stage for development of a common law of environmental quality.

These aims are primarily achieved by giving the individual or a class direct resort to the courts as a forum for initiating environmental action. Privative clauses, official discretion and the existence of administrative bodies will no longer prevent access to the courts on environmental issues.

Judicial action, however, is not intended to supplant any administrative regulation; it is simply meant to provide for some much needed review of the administrative process and a judicial forum for those cases where regulatory processes are lacking or insufficient. The courts are required to decide the validity and reasonableness of standards when actions are brought under them. If necessary, the courts can overrule standards set by an agency if they are found to be inadequate to protect the environment.¹⁸

The terms "pollution," "environmental quality," and "public trust" are purposely undefined. This allows the courts to establish their own standards and to have the freedom to question the operations and standards put forth by the legislature and agencies. This function of the courts is not intended to usurp the legislature's functions in setting standards and precisely defining environmental objectives. It will allow problems to be recognised and information elicited by litigation. This information can be utilised, if necessary, for legislative action. Thus, the process of environmental protection is seen as one subject to continual change and refinement.

The Act also imposes a reverse onus on the defendant. If a plaintiff makes out a *prima facie* case, the defendant must show that in fact he has not polluted the environment or that there is no feasible and prudent alternative to his conduct and that such conduct was consistent with the protection of the environment.¹⁹

The courts can grant permanent or temporary equitable relief by way of injunction. Such relief can be subject to conditions requiring the defendant to take steps to comply with the Act's objectives. At the conclusion of a case, the court is required to decide what impact the

conduct complained of has on the environment and the public trust.²⁰

The merit and potential weakness of the Michigan Act is that it makes the courts the forum for adjudication on environmental standards and their enforcement. The advantage in that is that individual citizens do not run into the complex *locus standi* problems that inhibit our present system. The question is again raised as to whether the courts are the best body to set environmental standards. It has been earlier suggested in this chapter that policy oriented courts or courts with access to expert advice can do this job. The Michigan experience seems to confirm this.²¹ If the courts in reaching their decision tend to be unduly restrictive or inhibit reasonable development, the legislature can overrule them but at least the issue has been put into the public arena. This is a superior process to the semi-secret highly internalised workings of our existing administrative and enforcement agencies.

The public trust concept does not have the judicial history in Canada that it enjoys in the United States. Nevertheless, it is a doctrine that could be utilised in Canada on the basis that all natural resources (including water) are vested in the hands of the provincial governments. It can be argued that provincial ownership of natural resources demands that they must be exploited or developed in the best interests of the people of that province. To that extent the provincial government is cast into the role of owner and trustee of the province's resources. Recognition of this role for provincial governments vis a vis natural resources can be seen in legislation passed to control the development of energy resources. It would not be a radical departure for any provincial government to recognise that the elements which comprise our

environment are a finite resource which must equally be made the subject of a public trust, and subject to rigid controls on exploitation.

Although the environmental Bill of Rights and Public Trust Doctrine have successfully been used in the United States to overcome the problem of standing and allows increased individual action, they both share in common the fact that courts have been called in to adjudicate on disputes. Environmental disputes to a large extent involve significant policy issues of resource allocation. This raises the fundamental question as to whether the court is the best forum for making such decisions. The United States experience with such schemes owes much of its success to the fact that their courts have been innovative and traditionally involved in deciding important issues of social and economic policy. One writer in discussing the role of the courts in such schemes has underscored the fact that an active and policy conscious judiciary is essential if the scheme is to work properly:²²

In addition, the courts in the fifties and sixties have begun more and more, to hand down decisions in the area of social legislation that meets the needs of our rapidly changing society. . . . The courts have broken new ground in areas where the other branches of government had lagged and refused to act.

Given the different constitutional structure in Canada, which inhibits courts from being significantly involved in crucial policy questions and the different legal tradition of the Canadian judiciary, it is submitted that should Canadian courts fail to deal adequately with the task given to them by such legislation, an alternative forum could be used for administrative review and environmental litigation, under a bill of rights or public trust formula.²³ If environmental decisions

demand multidisciplinary issues to be considered then a multidisciplinary tribunal with the necessary expertise could sit to review the agencies' or polluters' activities. The merits of such a tribunal or board have been summarised as follows:²⁴

Board can determine questions of compliance-non compliance (innocence-guilt) with environmental quality standards, questions of acceptability-non acceptability of proposed abatement programs in light of environmental quality standards, and questions of degree of responsibility and quantum of damages for pollution problems.

If such a tribunal is given the same freedom from political and economic pressures that courts are given, then it should ideally complement the grant of substantive environmental rights, should it be decided to bypass the courts as an environmental review forum.

2. Overcoming the Cost Problem

One of the practical bars to individual action on the environment is the high cost of the adversary process or appearances before administrative tribunals. Earlier in this chapter it was mentioned that the cost problem was a positive feature of our present system to the extent that it deterred vexatious litigants. Unfortunately costs can be a negative factor in that they often inhibit action by persons legitimately grieved.

Any scheme for enhanced public standing must be complemented by some provision for inhibiting the deterrent feature of costs where actions are taken by individuals or groups in the public interest.²⁵

Alternatively a mechanism can be established to fund public interest actions.²⁶

Our present rules as to costs are such that the losing litigant may not only have to pay his own costs but a substantial portion

of his opponents. This in effect provides a double financial disincentive to many prospective litigants. Furthermore it has been suggested that this cost structure favours the corporate polluter as:²⁷

The degree of discouragement is class related. The Canadian system is likely to discourage an individual of modest means from litigating. It is unlikely to discourage a corporate plaintiff who, by a simple cost-benefit analysis, determines that the cost of launching a frivolous action will be less than the profits reaped from an illegal activity carried on while the case drags on before the courts.

An important precedent for the funding of public interest groups has been laid down by Mr. Justice Berger in the McKenzie Valley Pipeline Inquiry. Interested parties will be funded on the basis of the following criteria:²⁸

1. There should be a clearly ascertainable interest that ought to be represented at the Inquiry.
2. It should be clear that separate and adequate representations of that interest will make a necessary and substantial contribution to the Inquiry.
3. Those seeking funds should have an established record of concern for, and should have demonstrated their own commitment to, the interest they seek to represent.
4. It should be shown that those seeking funds do not have sufficient financial resources to enable them adequately to represent that interest, and will require funds to do so.
5. Those seeking funds should have a clear proposal as to the use they intend to make of the funds, and should be sufficiently well organized to account for the funds.

Pursuant to these criteria at the conclusion of the preliminary hearings native and environmental organisations were recognised as legitimate public interest groups and awarded funds of \$400,000 and \$200,000 respectively. If such a funding process evidences a trend towards overcoming the cost factor in environmental action then effective public participation in pollution control will be enhanced, at least in

the policy making-resource management area. Consideration must be given to extending such funding to the public interest litigant, who, in the absence of a monetary claim, "continues to be the forgotten person in our legal system."²⁹

3. Overcoming the Information Problem

Citizen participation in environmental action will be largely symbolic if citizens are not given access to information which reposes in the hands of governments and administrative agencies. Information is crucial to the success of any litigation or appearance before an administrative agency or hearing.³⁰ The Canadian bureaucracy has been described as obsessed with secrecy.³¹

We've inherited a system where, in case of doubt, elected and appointed officials classify things and prevent their distribution. The problem is often that few people have any idea of the proper use of a classification system or of the need for it. All they know is that if they're uncertain if a document should be made public rather than risk error they simply classify it secret.

This desire for secrecy is fostered and nurtured by such legislation as the Official Secrets Act³² and the Public Service Employment Act,³³ which require government employees to take oaths of secrecy. The result is that in Canada the minister and the civil service have a wide power to control the release of information. Any effort by individuals to obtain such information can be blocked by the classification system and a ministerial claim of privilege. In such a situation the individual can go to a court to challenge the claim of privilege but such actions have been largely unsuccessful.

If public involvement in environmental control is to be meaningful then it must be informed participation. Some mechanism must be devised

whereby access can be had to governmental information. The most touted³⁴ model for such information retrieval is the United States Freedom of Information Act.³⁵ Under this Act each agency or department sets out rules outlining the procedure to be followed in any request for information. Any request for information must be considered and a decision made as to its release. If the request is denied, an application can be made to a higher departmental official and then to any court for adjudication. The Act reverses the present onus of proof. The presumption is that public documents should be freely available to the public and the onus is on the government to prove they should not be if any claim to secrecy or privilege is made. Finally, it should be noted that if a public official arbitrarily refuses to release any information, he may be dealt with by way of sanctions levied by the Civil Service Commission.³⁶

Environmental, administrative and enforcement agencies presently reach their decisions on the basis of information that is not available to the public. The present laws on confidentiality really give the citizen no insight into this highly internalised process. Without such information the citizen has no real basis on which to object to any proposed scheme or lack of enforcement activity. Confidentiality does have a role to play in any government but it need not be an absolute blanket barring reasonable requests for information. This defect can only be cured by legislation allowing reasonably free access to such information. It has been suggested that such legislation:³⁷

. . . should establish the right of any Canadian to see information in government files, subject to limited and reasonable restrictions, and should establish the means of securing that information. Government agencies should be required to establish procedures, whereby the

public may obtain desired information, and to keep indices of its rules, administrative and procedural manuals, and any factual studies that have been performed concerning matters within its jurisdiction.

Conclusion

At the outset of this chapter it was mentioned that our present pollution control schemes are largely administered and enforced by governmental agencies. It was suggested that public action on the environment was desirable to check the pervasive influence of such agencies and to allow direct action against polluters where enforcement was lacking. Any citizen who has sought to get involved in such action has faced difficulties in terms of standing, cost, and information retrieval. Suggestions were made for overcoming these problems by the introduction of such legislation as an Environmental Bill of Rights or Public Trust Act, coupled with a funding mechanism for public interest litigants and a Freedom of Information Act.

Such changes will not altogether solve the problem. Any action under such legislation must still be initiated by individuals or concerned groups. Private action presently tends to be unorganised, sporadic and initiated "after irreparable injury takes place or harmful construction begins."³⁸ The effectiveness of any general grant of standing will be determined by the extent and the manner in which it is used. Provision must be made to educate the public to be responsive to the environmental problem so that they are aware of their rights and can develop co-ordinated strategies for exercising them. To the extent that a general right of standing is given, increased citizen suits will also provide a forum whereby the public and legislators can be made aware of basic environmental

issues. Although such reasoning may be considered circular, it is submitted that it is not totally illogical or facetious to suggest that enhanced opportunities for public action on the environment will increase awareness of the problems, a recognition of one's environmental rights and ultimately increased public action on the environment.

Perhaps, the last word on the effectiveness of direct public action on the environment can be left to Professor Thompson who suggests that the legal system must contribute to the consciousness of the citizen before it can be truly effective:³⁹

Given the most perfectly fashioned and functioning system of environmental protection, its mainspring must be a new consciousness of concern and respect for the natural world--a new "land ethic."⁴⁰

CHAPTER VII

FOOTNOTES

1. Castrilli and Black, "The Need for an Environmental Bill of Rights" (Globe and Mail, Feb. 7th, 1975).
2. See, Emond, "Participation and the Environment: A Strategy for Democratizing Canada's Environmental Protection Laws." (1975) 13 Osg. Hall L.J. 783, 820.
3. Opas, "The Place of the Lawyer in the Administration of Environmental Legislation" (1975) 49 Aust. L. J. 411, 419.
4. In the United States the courts have been prepared to liberalise the basis of standing to the point that individuals not personally threatened but nevertheless genuinely interested in protecting the environment have been given standing to challenge administrative decisions. See, *Scenic Hudson Preservation Conference v. F.P.C.* 354 F. 2d 608 (2d Cir. 1965), cert. denied, 384 U.S. 941 (1966); *Road Review League, Town of Bedford v. Boyd*; *Citizens Committee for the Hudson Valley v. Volpe*, 302 F. Supp. 1083 (S.D.N.Y. 1969).
5. See, Gibson, "The Value of Participation" in *Environmental Management and Public Participation* (1976) 7 ; Elder, "An Overview of the Participatory Environment in Canada," in *Environmental Management and Public Participation* (1976) 370; Emond, *supra.*, n. 2, 783; Elder, "The Participatory Environment in Alberta" (1974) 12 Alta. L.J. 403; Morley, "The Legal Framework for Public Participation in Canadian Water Management" in *Environmental Management and Public Participation* (1976), 40, 42.
6. "Legal Responses to Pollution Problems--Their Strengths and Weaknesses" (1972) 12 Nat. Res. J. 227, 237.
7. Thayer, "Participation and Liberal Democratic Government," a working paper prepared for the Ontario Government Committee on Government Productivity (Toronto: Queen's Printer, 1971) 20, in Emond, *supra.*, n. 2, 786.
8. See, "The National Conservation Bill of Rights" proposed as a Joint Resolution in the United States House of Representatives (H.J. Res. 1321) on June 13th, 1968 reproduced in Falk, *The Endangered Planet* (1st ed. 1971) p. 407. For a further suggested statute see, Zucker, "Environmental Right of Action--A Suggested Statute and Commentary" (1972) 7 Harv. Civil Rights Law Rev. 520.

In most United States jurisdictions the right to a pollution free environment can be best incorporated by state constitutional amendment. For example the Pennsylvania constitution has been amended (P.A.H.R. 958, 1969) to read as follows (section 27):

The people have a right to clean air, pure water, and to the preservation of the natural scenic, historic and aesthetic values of the environment. . . .

9. See, Hanks and Hanks, "An Environmental Bill of Rights: The Citizen Suit and the National Environmental Policy Act of 1969" 24 Rutgers Law Rev. 230, 248.
10. See, Sax, "Michigan's Environmental Protection Act of 1970: A Progress Report" (1972) 70 Mich. L. Rev. 1003.
11. See, FLORIDA
 Fla. Const. art. II, 7 (effective Nov. 5th, 1968).
 ILLINOIS
 Ill. Const. art. XI, 1, 2 (effective July 1st, 1971).
 MICHIGAN
 Mich. Const. art. , 52 (effective Jan. 1st, 1964).
 NEW YORK
 N.Y. Const. art. XIV, 4 (effective Jan. 1st, 1970).
 RHODE ISLAND
 R.I. Const. art. I, 17 (amendment adopted Nov. 3rd, 1970).
 VIRGINIA
 Va. Const. art., XI, 2 (adopted 1971).
12. For a detailed discussion of this doctrine see, Sax, "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention" (1970) 68 Mich. L. Rev. 473.
 For a good summary of this doctrine see, Murphy, "Environmental Law: New Legal Concepts in the Anti Pollution Fight" (1971) 36 Mo. L. Rev. 78, 93.
13. Sax, *Defending the Environment* (1970) 165.
14. Sax, *ibid.*, 162.
15. For the background discussions to such legislation see, Howard, "State Constitutions and the Environment" (1972) 58 Va. L. Rev. 193;
 Roberts, "The Right to a Decent Environment: Progress Along a Constitutional Avenue" In *Law and the Environment* (1970);
 Roberts, "The Right to a Decent Environment; E = MC²: Environment Equals Man Times Courts Redoubling Their Efforts" (1970) 55 Cornell L. Rev. 674;
 Sive, "Some Thoughts of an Environmental Lawyer in the Wilderness of Administrative Law" (1970) 70 Colum. L. Rev. 612, 643.

16. Act 127 P.A. 1970, Mich. Comp. Laws Ann. Nos. 691-1201-1207.
The full text of the Act is set out here for consideration.

The People of the State of Michigan enact:

Sec. 1. This act, shall be known and may be cited as the "Thomas J. Anderson, Gordon Rockwell environmental protection act of 1970."

Sec. 2. (1) The attorney general, any political subdivision of the state, any instrumentality or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organization or other legal entity may maintain an action in the circuit court having jurisdiction where the alleged violation occurred or is likely to occur for declaratory and equitable relief against the state, any political subdivision thereof, any instrumentality or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organisation or other legal entity for the protection of the air, water, and other natural resources and the public trust therein from pollution, impairment or destruction.

(2) In granting relief provided by subsection (1) where there is involved a standard for pollution or for an anti-pollution device or procedure, fixed by rule or otherwise, by an instrumentality or agency of the state or a political subdivision thereof, the court may:

(a) Determine the validity, applicability and reasonableness of the standard.

(b) When a court finds a standard to be deficient, direct the adoption of a standard approved and specified by the court.

Sec. 2a. If the court has reasonable ground to doubt the solvency of the plaintiff or the plaintiff's ability to pay any cost or judgment which might be rendered against him in an action brought under this act the court may order the plaintiff to post a surety bond or cash not to exceed \$500.00.

Sec. 3. (1) When the plaintiff in the action has made a prima facie showing that the conduct of the defendant has, or is likely to pollute, impair or destroy the air, water or other natural resources or the public trust therein, the defendant may rebut the prima facie showing by the submission of evidence to the contrary. The defendant may also show, by way of an affirmative defence, that there is no feasible and prudent alternative to defendant's conduct and that such conduct is consistent with the promotion of the public health, safety and welfare in light of the state's paramount concern for the protection of its natural resources from pollution, impairment or destruction. Except as to the affirmative defense, the principles of burden of proof and weight of the evidence generally applicable in civil actions in the circuit courts shall apply to actions brought under this act.

(2) The court may appoint a master or referee, who shall be a disinterested person and technically qualified, to take testimony and make a record and a report of his findings to the court in the action.

(3) Costs may be apportioned to the parties if the interests of justice require.

Sec. 4. (1) The court may grant temporary and permanent equitable relief, or may impose conditions on the defendant that are required to protect the air, water and other natural resources or the public trust therein from pollution, impairment or destruction.

(2) If administrative, licensing or other proceedings are required or available to determine the legality of the defendant's conduct, the court may remit the parties to such proceedings, which proceedings shall be conducted in accordance with and subject to the provisions of Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24. 313 of the Compiled Laws of 1948. In so remitting the court may grant temporary equitable relief where necessary for the protection of the air, water and other natural resources or the public trust therein from pollution, impairment or destruction. In so remitting the court shall retain jurisdiction of the action pending completion thereof for the purpose of determining whether adequate protection from pollution, impairment or destruction has been afforded.

(3) Upon completion of such proceedings, the court shall adjudicate the impact of the defendant's conduct on the air, water or other natural resources and on the public trust therein in accordance with this act. In such adjudication the court may order that additional evidence be taken to the extent necessary to protect the rights recognized in this act.

(4) Where, as to any administrative, licensing, or other proceeding, judicial review thereof is available, notwithstanding the provisions to the contrary of Act No. 306 of the Public Acts of 1969, pertaining to judicial review, the court originally taking jurisdiction shall maintain jurisdiction for purposes of judicial review.

Sec. 5. (1) Whenever administrative, licensing or other proceedings, and judicial review thereof are available by law, the agency or the court may permit the attorney general, any political subdivision of the state, any instrumentality or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organization or other legal entity to intervene as a party on the filing of a pleading asserting that the proceeding or action for judicial review involves conduct which has, or which is likely to have, the effect of polluting, impairing or destroying the air, water or other natural resources or the public trust therein.

(2) In any such administrative, licensing, other other proceedings, and in any judicial review thereof, any alleged pollution, impairment or destruction of the air, water or other natural resources or the public trust therein, shall be determined, and no conduct shall be authorized or approved which does, or is likely to have such effect so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare.

(3) The doctrines of collateral estoppel and res judicata may be applied by the court to prevent multiplicity of suits.

Sec. 6. This act shall be supplementary to existing administrative and regulatory procedures provided by law.

Sec. 7. This act shall take effect October 1, 1970.

This act is ordered to take immediate effect.

17. Sax, *supra.*, n. 13, 248.
18. Michigan Environmental Protection Act, s. 2(2).
19. *Ibid.*, s. 3(1).
20. *Ibid.*, s. 4(3).
21. See, Sax, "Michigan's Environmental Protection Act of 1970: A Progress Report" (1972) 70 Mich. Law Rev. 1003;
Sax and Di Mento, "Environmental Citizen Suits: Three Years Experience Under the Michigan Environmental Protection Act" (1974-75) 5 Eco. L. Q. 1.
22. *Supra.*, n. 12, 103.
23. See, Whitney, "The Case for creating a special Environmental Court System" (1973) 14 W. & M. L. Rev. 473;
"Enforcing Environmental Policy: The Environmental Ombudsman" (1971) 56 Cornell L. Rev. 487;
Whitney, "The Case for creating a special Environmental Court System: A Further Comment" (1973) 15 W. & M. L. Rev. 33.
24. *Supra.*, n. 2, 815. The author here does suggest such tribunals should adjudicate on disputes within the framework of set criteria. He suggests the criteria should be set by a hearing process.
25. To some extent this is done by agencies letting it be known that costs will not be awarded against a losing intervenor unless his actions are clearly vexatious.
26. To some extent certain agencies fund the actions of intervenors. See, The Expropriations Act R.S.C. 1970, (1st Supp.) s. 8(9).
27. Castrilli, "The American or the Canadian Cost Rule? An Empty Choice for the Public Interest Litigant" (1975) C.E.L.N. 175.
28. McKenzie Valley Pipeline Inquiry Statement, August 14th, 1974 (1974) C.E.L.N. 9.
29. *Supra.*, n. 27, 178.

30. See Thompson, "Freedom of Information," in *Ask The People* (Paper presented to Workshop on the Canadian Law and the Environment, Banff, Alberta, March 5-8, 1972).
Franson, "Governmental Secrecy in Canada" (1973) 2 *Nature Canada*, 31.
31. Henson, Director of Dalhousie Institute of Public Affairs.
(Sask. Star Phoenix, Aug. 21st, 1976).
See Rubin, Testimony Before the Senate-Commons Committee on Statutory Instruments (Nov. 17th, 1975).
32. R.S.C. 1970, c. 0-3.
33. R.S.C. 1970, c. P-32 s. 23.
34. See Castrilli, Estrin, and Swaigen, "An Environmental Impact Assessment Statute for Ontario with Commentary" in *Environmental Management and Public Participation* (1976) 319, 330, 357.
Lucas and McCallum, "Looking at Environmental Impact Assessment" in *Environmental Management and Public Participation* (1976) 306, 314.
35. 5 U.S.C. 552 (1970); am. 5 U.S.C.A. 552 (Supp. 1, 1975)
See too, Federal Advisory Committee Act, 5 U.S.C. App. 1 (Supp. III, 1973); am. 5 U.S.C.A. App. 1 (Supp. 1, 1975).
36. For a more detailed analysis of the amended Freedom of Information Act see, Nader, "New Opportunities for Open Government: The 1974 Amendments to the Freedom of Information Act and the Federal Advisory Committee Act" (1975) 25 *Am. U. L. Rev.* 1;
Vaughn, "The Sanction Provisions of the Freedom of Information Act Amendments" (1975) 25 *Am. U. L. Rev.* 7;
Halperin, "Judicial Review of National Security Classifications By the Executive Branch After the 1974 Amendments to the Freedom of Information Act" (1975) 25 *Am. U. L. Rev.* 27;
Ellsworth, "Amended Exemption 7 of the Freedom of Information Act" (1975) 25 *Am. U. L. Rev.* 37.
37. Franson and Burns, "Environmental Rights for the Canadian Citizen: A Prescription for Reform" (1974) 12 *Alta. L. Rev.* 153, 164.
38. *Supra.*, n. 12, 104.
39. Thompson, "Legal Responses to Pollution Problems--Their Strengths and Weaknesses" (1972) 12 *Nat. Res. J.* 227, 241.
40. Leopold, *A Sand Country Almanac* (1966) 217-220.

CHAPTER VIII

SUMMARY AND RECOMMENDATIONS

Summary

At the outset of this thesis some investigation was made into the effectiveness of the common law as a means of water pollution control. This was done as the common law had long been relied on as the traditional means for dealing with pollution problems. For a variety of reasons, namely standing, cost, and evidence collection, it was concluded that the common law alone was inadequate to deal with the current environmental problem. In reaching such a conclusion it is not intended to deny totally the role of the common law. For a long time it was the only avenue of protest available to the environmental litigant. Unfortunately the common law has been slow to change and adapt to the challenges presented today. Some recognition has been given to new concepts such as "aesthetic damage," but a generally conservative judiciary has restrained the common law's potential for growth in the environmental field. Nevertheless, continued litigation and innovative legal argument may persuade the judiciary to expand the environmental control function of the common law.

The initial legislative involvement in water pollution control was through criminal proceedings. Certain environmentally harmful conduct was described and proscribed by way of criminal sanctions. The general public nuisance concept was refined by the advent of legislation which made it an offence to pollute, *inter alia*, fisheries, navigable and migratory bird waters. It was found that the criminal law approach was beset by definitional problems, a heavy burden of proof on the prosecution, sporadic enforcement and inconsistent sentencing practices. Despite such problems Canadian pollution control legislation is characterised

by its penalty provisions. This is a necessary recognition of the fact that no matter how sophisticated a scheme of pollution control is employed, in the last resort it must be backed up by the coercive powers of the state.

In the late sixties and early seventies public awareness of environmental issues intensified and resulted in more sophisticated legislative schemes being adopted. The permit system and preventive controls have been incorporated in all Canadian jurisdictions as the key methodology for dealing with water pollution. Essentially, these systems demand that all existing effluent discharges be licensed and that any new dischargers must have their construction plans approved. In theory such a licensing system implies that a high degree of control can be exerted over any licensees. In practice this has not been so. The introduction of the permit scheme was not preceded by any comprehensive investigation into the ability of receiving waters to absorb a multitude of potential pollutants. In the absence of such planning, few comprehensive water quality criteria have been published and few mandatory standards set for the grant of any permit or construction approval. Thus the legislation introducing such schemes has been broadly drafted, leaving it up to the administrative agencies to fill in the details at their discretion. This has led to the negotiating of standards by the agency with the polluter they are supposed to control. Finally, it was also found that no real provision for countervailing public input into the setting of water quality standards or the issuance of permits was made by the legislation. Any public involvement was at the discretion of the agency.

The environmental problem has been viewed by several experts as essentially an economic problem resulting from profit maximisation in a context where no economic value was attached to the environment. Viewed in this light it has been suggested that economic incentives and disincentives can be utilised to deal with pollution. Techniques such as the effluent fee if correctly structured can be an incentive to reduce pollution whereas the permit system tends to simply maintain a permitted level of pollution. Equally a system of economic incentives such as tax benefits or grants can alleviate the adverse effects generated by the imposition of new water quality control systems and standards.

The almost total reliance on administrative agencies coupled with the exclusion of the public has hindered the effectiveness of the administration, enforcement and planning processes. The permit scheme imposes a point by point form of regulation which makes tremendous demands on the administrative agencies. Some attempt has been made to solve the problems of co-ordinating activity and the lack of sufficient personnel and financial resources by the creation of distinct Departments of the Environment.

No matter how technically perfect a control scheme appears to be, it will only be as efficient as its administrators allow it to be. The public can and should be enlisted to be a check on the activity of polluters and administrative agencies. Public participation at all levels of environmental control is necessary to correct some of the failures and problems that are evidenced in the present system.

On the basis of this research into and these findings about the current Canadian water pollution control schemes, the following broad recommendations for change and improvement are tendered.

Recommendations

(i) *A broad national policy for environmental protection must be developed.* In the present absence of such a policy it is often difficult to assess what it is governments are trying to achieve. This in turn makes it extremely difficult to determine the real effectiveness of the current pollution control schemes. In considering certain legislation one is left undecided as to whether the government is trying to abate, reduce or prevent pollution. Similarly the absence of stated levels of optimum water quality sought to be achieved makes it difficult to determine the effectiveness of much of the legislation in force.

A policy must be developed wherein protection of the environment is stated to be of prime, though not necessarily paramount, importance and objectives to be attained are set out. The federal Minister of the Environment speaking at the U.N. Habitat Conference in June 1976 said that it was the object of his department to have all of Canada's waters clean and pure by the 1980's.¹ When asked for a date and the methodology by which such a goal was to be achieved no clear answer was forthcoming. Such sweeping statements are no more than rhetoric and provide no policy framework within which sound goal oriented environmental planning and control can take place.

It is conceded that the development of such a policy will be a long process demanding co-operation from all levels of government and all sectors of the public but it is submitted that it is not an impossible task. It has been said that "while the process of federal/provincial negotiations is often slow and frustrating, it is a necessary process in a federal state in order to achieve effective government."²

(ii) Improved co-operation is needed between federal and provincial governments and agencies in order to harmonise and integrate the present pollution control laws. The problem of the environment knows no political boundaries and any solutions advanced to deal with the problem should attempt to realise this fact. Obviously there are jurisdictional, constitutional and political factors which will inhibit such collective action but they should not be allowed to stop a unified approach being taken to the problem.

There is considerable evidence that co-operation can be achieved and a unified strategy developed. In October 1975 the federal government and seven provinces signed an agreement to develop uniform standards and to develop desirable levels of baseline environmental quality. The federal government and the provinces have agreed to:³

- Establish desirable levels of baseline environmental quality.
- Develop national requirements and guidelines for pollution control by industry and municipalities.
- Consult on methods of monitoring environmental quality, and exchanging assessment data.
- Implement pollution control programs.
- Develop contingency plans to deal with environmental emergencies, such as oil spills.
- Co-operate in research, staff training, and exchange of techniques.
- Share costs for joint programs.

If such agreement successfully produces basic pollution controls and guidelines which apply across Canada, then many of the present problems such as differing standards, levels of enforcement and pollution havens will be eliminated. If this agreement evidences a genuine spirit of co-operation then it should be extended to include the implementation of such legislation as the Canada Water Act which has lain dormant for the last five years.

(iii) In the light of any broad policy or stated objectives as to water quality a combination of control schemes should be developed to best give effect to such policy or objectives. The present tendency in the current Canadian water pollution control schemes has been to concentrate on a single system--the permit to pollute. Although the permit scheme is not without its faults it has been used with varying degrees of success across Canada. Departments of the Environment must, however, be convinced that it is not the only scheme available. If the permit system is to remain as the core of any water pollution control scheme, it should be modified and complemented by the other methods of control considered. For instance, the right mixture of economic incentives and disincentives can be grafted onto the permit system. Thus a polluter may be given a licence to pollute, but encouraged to reduce his permitted level of pollution by a system of effluent fees. It is submitted that differing legal responses or combinations thereof should be considered by each appropriate jurisdiction to see which one most effectively achieves a specified policy goal or stated objectives.

(iv) A system of environmental planning and impact assessment should be instituted by all levels of government for any development activity which is likely to significantly affect the environment.

Environmental degradation is the result of a series of inter-related activities, which should be scrutinised in a multidisciplinary forum before any development decision is made. Such a strategy will allow governments to ask the right questions at the right time (before the damage is done) in order that an informed decision can be made.

Many of the present difficulties and conflicts in environmental planning are attributable to the lack of a forum for the evaluation of the socio-economic-environmental impact of any development. The *Beaufort Sea* case might be resurrected again to illustrate the problem. In that case the resolution of the critical issue of resource development versus environmental protection had to take place through an exchange of ministerial notes and finally a cabinet meeting. This is far from the open scientific assessment procedure that the facts of the case demanded. An integrated and systematic assessment process, such as the United States National Environmental Policy Act, should be enacted.

(v) All levels of government need to make a resolution in favour of real public participation in any scheme of pollution control. It has been pointed out throughout this thesis that public participation at all levels of pollution control is extremely circumscribed. The reasons for such participation have been expressed earlier, hence it is sufficient to say at this stage that governments should recognise that full rights of public participation will be to the advantage of the planning, administration and enforcement processes, the individual and the society.

Different techniques for public participation will need to be developed depending on what level of the process of environmental control is involved. Public hearings are perhaps best for getting input into policy formulation but are probably unsuitable for objection to a permit application which perhaps demands an adjudicatory type of forum. Similarly public hearings may be best used for the setting of water quality criteria but are not suitable for review of an agency's action or inaction against an alleged polluter. The necessity to develop the appropriate forum and methodology for public participation should not be allowed to detract from the principle that such participation is necessary and desirable.

(vi) Individual members of the public should be given substantive rights in the environment. The wide discretion and powers given to administrative agencies coupled with problems of standing have made it difficult for individuals to seek review of the agency's actions or to proceed directly against a polluter. Legislation such as an Environmental Bill of Rights or the Michigan Environmental Protection Act can be utilised to allow the individual to act to vindicate the environment. Such a grant of standing should also be accompanied by some funding mechanism and a legislated access to public information.

Conclusion

Current attitudes to pollution control range from outright pessimism, (we and the environment are doomed) to unjustified optimism and the expectation that technology will solve all the problems before

it is too late. In many instances, an emotional rather than a rational approach to the problem has prevailed. In this thesis legal responses to the problem of water pollution control in Canada were considered as they represent a rational attempt to come to grips with the problem.

This thesis represents an attempt to assess the nature and effectiveness of the legal responses to the problem. Many of the weaknesses in the present Canadian water pollution control scheme have been exposed. None of them are insurmountable. There are, however, limits to lawmaking. We cannot simply cure the situation by passing more laws, no matter how good they are. The problem of the environment is such that it impinges on the lives of all people and demands a great commitment of resources. The individual citizen is a largely untapped resource that can be effectively used to remedy many of the weaknesses in the present scheme. Recommendations have been made in this thesis to improve the existing control scheme and to involve the individual citizen in a problem which significantly affects him.

The problem of the environment is a continuing one. The most heartening sign is that in a relatively short space of time society has faced up to the challenge. There is a long way to go yet. The impetus for change and improvement of the environment must come from a responsible public and responsive government.

CHAPTER VIII

FOOTNOTES

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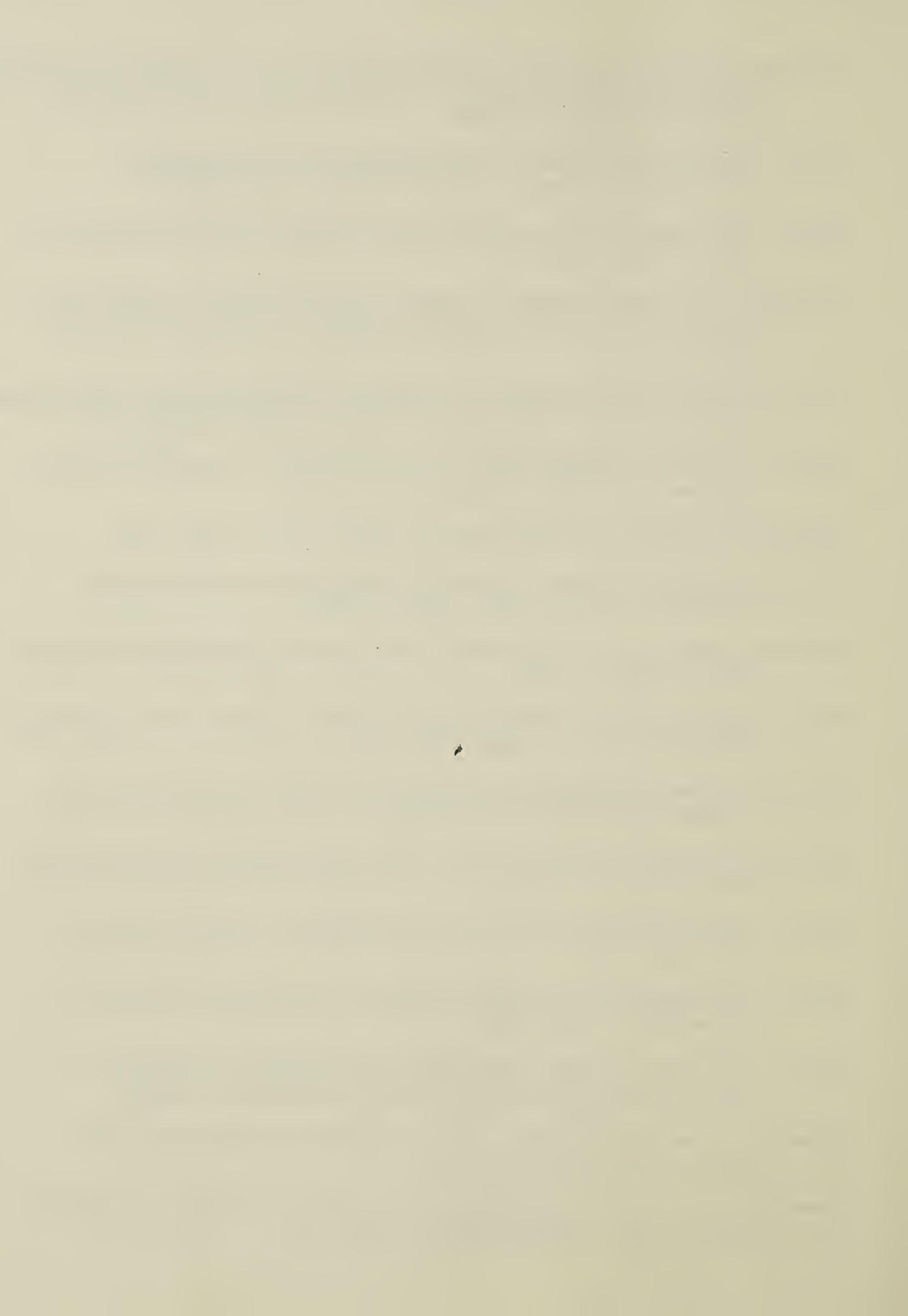
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